Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 11:54:21 ON 12 DEC 2006

=> fil reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 11:54:30 ON 12 DEC 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 11 DEC 2006 HIGHEST RN 915185-72-7
DICTIONARY FILE UPDATES: 11 DEC 2006 HIGHEST RN 915185-72-7

New CAS Information Use Policies, enter HELP USAGETERMS for details.

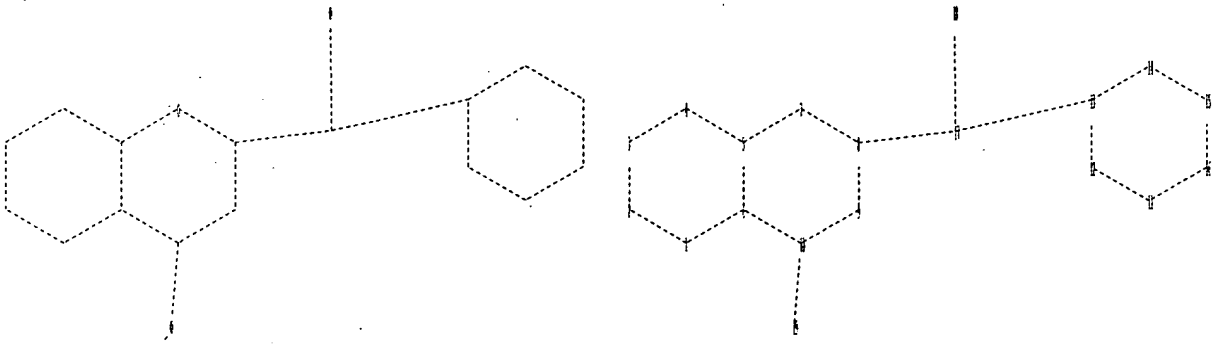
TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=>
Uploading C:\Program Files\Stnexp\Queries\10-725349z.str



chain nodes :

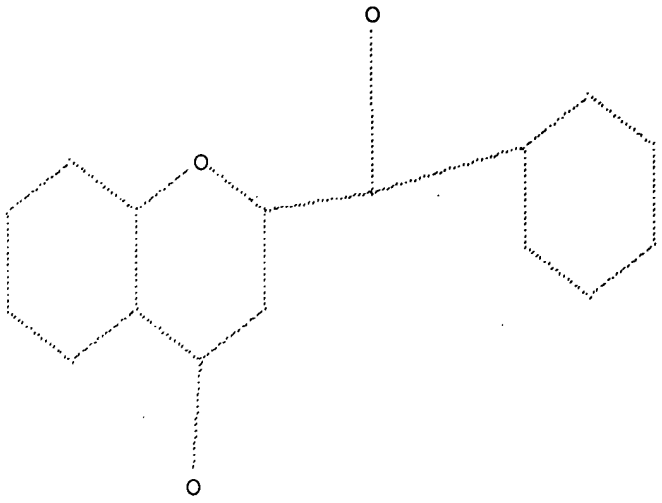
```
17  18  19
ring nodes :
1  2  3  4  5  6  7  8  9  10  11  12  13  14  15  16
chain bonds :
8-17  10-19  13-17  17-18
ring bonds :
1-2  1-6  2-3  3-4  4-5  5-6  5-7  6-10  7-8  8-9  9-10  11-12  11-16  12-13  13-14
 14-15  15-16
exact/norm bonds :
1-2  1-6  2-3  3-4  4-5  5-6  5-7  6-10  7-8  8-9  8-17  9-10  10-19  11-12  11-16
12-13  13-14  13-17  14-15  15-16  17-18


Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:Atom  8:Atom  9:Atom  10:Atom
11:Atom  12:Atom  13:Atom  14:Atom  15:Atom  16:Atom  17:CLASS  18:CLASS  19:CLASS



L1      STRUCTURE UPLOADED

=> d
L1 HAS NO ANSWERS
L1              STR
```




```
Structure attributes must be viewed using STN Express query preparation.


=> s l1 ful
FULL SEARCH INITIATED 11:55:02 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -     5812 TO ITERATE

100.0% PROCESSED     5812 ITERATIONS                          145 ANSWERS
SEARCH TIME: 00.00.01

L2          145 SEA SSS FUL L1

=> fil caplus
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
```

	ENTRY	SESSION
FULL ESTIMATED COST	166.94	167.15

FILE 'CAPLUS' ENTERED AT 11:55:06 ON 12 DEC 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 12 Dec 2006 VOL 145 ISS 25
FILE LAST UPDATED: 11 Dec 2006 (20061211/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply.
They are available for your review at:

http://www.cas.org/infopolicy.html

=> s l2
L3 35 L2

=> d ibib ed abs 1-4

L3 ANSWER 1 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2006:100738 CAPLUS
DOCUMENT NUMBER: 144:198849
TITLE: Novel dosage form comprising modified-release and immediate-release active ingredients
INVENTOR(S): Vaya, Navin; Karan, Rajesh Singh; Sadanand, Sunil; Gupta, Vinod Kumar
PATENT ASSIGNEE(S): India
SOURCE: U.S. Pat. Appl. Publ., 49 pp., Cont.-in-part of U.S. Ser. No. 630,446.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2006024365	A1	20060202	US 2005-134633		20050519
IN 193042	A1	20040626	IN 2002-MU697		20020805
US 2004096499	A1	20040520	US 2003-630446		20030729
PRIORITY APPLN. INFO.:			IN 2002-MU697	A	20020805
			IN 2002-MU699	A	20020805
			IN 2003-MU80	A	20030122
			IN 2003-MU82	A	20030122
			US 2003-630446	A2	20030729

ED Entered STN: 03 Feb 2006
AB A dosage form comprising of a high dose, high solubility active ingredient as modified release and a low dose active ingredient as immediate release where the weight ratio of immediate release active ingredient and modified release active ingredient is from 1:10 to 1:15000 and the weight of modified release active ingredient per unit is from 500 mg to 1500 mg; a process for preparing the dosage form. Tablets containing 10 mg sodium pravastatin and 1000 mg niacin were prepared The release of sodium pravastatin after 24 h was 67.7%, and the release of niacin after 1 h was 84.1%.

L3 ANSWER 2 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:982063 CAPLUS
DOCUMENT NUMBER: 144:222887
TITLE: Crystal and Molecular Structures of Phosphonolactone Derivatives of Chromone
AUTHOR(S): Malecka, Magdalena; Massa, Werner; Budzisz, Elzbieta
CORPORATE SOURCE: Department of Crystallography and Crystal Chemistry, University of Lodz, Lodz, 149/153, Pol.
SOURCE: Structural Chemistry (2005), 16(4), 401-407
CODEN: STCHES; ISSN: 1040-0400
PUBLISHER: Springer Science+Business Media, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 09 Sep 2005
AB The crystal structure of isopropylideno-2-methylhydrazonium salt of (±)-1-hydroxy-1-oxo-3-phenyl-1,3-dihydro-1λ5-2,1-oxaphospholo[4,5-b]-4H-1-benzopyran-4-one (I) and its acid (±)-1-hydroxy-1-oxo-3-phenyl-1,3-dihydro-1λ5-2,1-oxaphospholo[4,5-b]-4H-1-benzopyran-4-one (II) were determined Crystals of I are monoclinic, space group P21/n, and crystals of II are orthorhombic, space group Fdd2. Condensed rings are almost planar, the P atom adopts nearly tetragonal geometry. The mol. packing is influenced by inter- and intramol. contacts, which can be recognized as H bonds.
REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:810365 CAPLUS
DOCUMENT NUMBER: 142:229341
TITLE: (±)-(4-Oxo-4H-chromen-2-yl)(phenyl)methyl acetate
AUTHOR(S): Malecka, Magdalena; Massa, Werner; Budzisz, Elzbieta
CORPORATE SOURCE: Department of Crystallography and Crystal Chemistry, University of Lodz, Lodz, PL-90236, Pol.
SOURCE: Acta Crystallographica, Section C: Crystal Structure Communications (2004), C60(10), o762-o764
CODEN: ACSCEE; ISSN: 0108-2701
PUBLISHER: Blackwell Publishing Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 05 Oct 2004
AB The title compound, C18H14O4, forms a supramol. structure via π-π stacking and weak C-H...O and C-H...π interactions. The benzopyran moiety is almost planar. The benzene ring of the phenylmethyl acetate substituent is nearly perpendicular to the fused benzene and pyran rings and also to the MeOAc group. Crystallog. data are given.
REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 4 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:466702 CAPLUS
DOCUMENT NUMBER: 141:38528
TITLE: Preparation of 2-benzoylchromone derivatives as inhibitors of the tyrosine kinase
INVENTOR(S): Mujica-Fernaud, Teresa; Buchholz, Herwig; Carola, Christophe; Sirrenberg, Christian; Rautenberg, Wilfried
PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Germany
SOURCE: Ger. Offen., 22 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
DE 10256174	A1	20040609	DE 2002-10256174		20021202
EP 1426378	A1	20040609	EP 2003-25849		20031111
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK					
US 2004176440	A1	20040909	US 2003-725349		20031202
PRIORITY APPLN. INFO.:			DE 2002-10256174	A	20021202

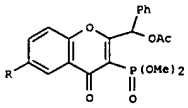
OTHER SOURCE(S): CASREACT 141:38528; MARPAT 141:38528
ED Entered STN: 10 Jun 2004
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

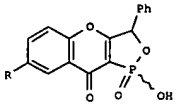
AB New compds. I [R = OH, OA, OPh, Ar, OC(:O)A, SO3H, SO3A, OSO3H, OSO3A, OSO2A, SO2A, halogen (F, Cl, I, Br), CO2H, CO2A, CONH2, NHSO2A, COA, CHO, SO2NH2; RR = OCH2O, OCH2CH2O; A = (un)branched C1-10-alkyl, C1-10-fluoroalkyl; Ar = (un)substituted Ph; X = OH; XX = OCH2O, OCH2CH2O; n = 1 - 4; m = 1 - 5], their pharmaceutically acceptable derivs., solvates and stereoisomers, are inhibitors of the tyrosine kinase and can for the treatment by tumors, to the neuroprotection and for the protection of the stress proteins of the skin is used. The procedure for the preparation of I is characterized by: (a) hydroxyacetophenones II are cyclized with AOC(:O)C(:O)OA (A = C1-6-alkyl) to chromones III ; (b) hydrolysis of III to acid IV; (c) chlorination to acid chloride V ; (d) Friedel-Crafts acylation of PhRm. Thus, 5-Hydroxy-2-(2,4-dihydroxybenzoyl)chromone (VI) was prepared from 2,6-dihydroxyacetophenone via cyclocondensation with (EtO2C)2, hydrolysis with aqueous HCl in MeCO2H, chlorination with with (COCl)2 in CH2Cl2 containing catalytic DMF, then Friedel-Crafts acylation of resorcinol in THF containing AlCl3. Several drug dosage formulations are presented.

```
=> d fbib ed abs hitstr 5-
YOU HAVE REQUESTED DATA FROM 31 ANSWERS - CONTINUE? Y/(N):y
```

L3 ANSWER 5 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2002:883633 CAPLUS
DN 138:385495
TI A new series of 2-substituted 3-phosphonic derivatives of chromone. Part II. Synthesis, in vitro alkylating and in vivo antitumor activity
AU Budzisz, Elzbieta; Graczyk-Wojciechowska, Julita; Zieba, Remigiusz; Nawrot, Barbara
CS Medical University of Lodz, Faculty of Pharmacy, Chair of Medical Chemistry, Lodz, 90-151, Pol.
SO New Journal of Chemistry (2002), 26(12), 1799-1804
CODEN: NJCHE5; ISSN: 1144-0546
PB Royal Society of Chemistry
DT Journal
LA English
OS CASREACT 138:385495
ED Entered STN: 21 Nov 2002
GI



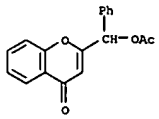
I



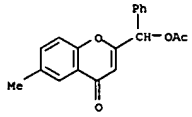
II

AB Products of the reaction of (±)-O-acetylmandeloyl chloride with, resp., Na 2-hydroxy- or 2-hydroxy-5-methylacetophenone were brominated and coupled with tri-Me phosphite to give the Perkov products 4a and 4b, the Wittig-type products 6a and 6b and the title 3-phosphonic derivs. of chromone I, 7a [2-[1-(±)-acetoxybenzyl]-3-(dimethoxyphosphoryl)-4-oxo-4H-chromene] and 7b [2-[1-(±)-acetoxybenzyl]-3-(dimethoxyphosphoryl)-4-oxo-6-methyl-4H-chromene]. Esters 7a and 7b were subjected to acidic hydrolysis to give the corresponding phosphonic acids 8a and 8b, and the unexpected phosphonolactones II (R = H 9a and Me 9b). They were also treated with benzylamine forming the corresponding salts of the cyclic phosphonolactones (10a and 10b). Derivs. 4a,b, 6a,b-10a,b were tested for in vitro alkylating activity while compds. 7a, 7b and 9a were tested for in vivo antitumor activity. As determined by in vitro Preussmann tests, compds. 4, 6 and 7 possess strong alkylating activity. Compds. 10 have moderate potential for alkylation, whereas the remaining compds. 8 and 9 are only weakly active. The derivs. 7a, 7b and 9a demonstrated low in vivo antitumor activity against lymphocytic leukemia L1210, whereas compound 7b exhibited significant antitumor activity against leukemia P388 in mice.
IT 525599-68-2P 525599-83-1P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL

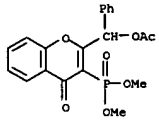
L3 ANSWER 5 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
(Biological study); PREP (Preparation)
(prepn. and antitumor activity of substituted phosphonic derivs. of chromone)
RN 525599-68-2 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-[(acetyloxy)phenylmethyl]- (9CI) (CA INDEX NAME)



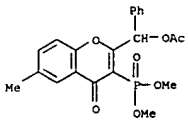
RN 525599-83-1 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-[(acetyloxy)phenylmethyl]-6-methyl- (9CI) (CA INDEX NAME)



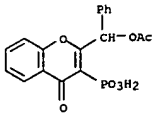
IT 525599-69-3P 525599-85-3P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
(preparation, acid-promoted cyclization and antitumor activity of substituted phosphonic derivs. of chromone)
RN 525599-69-3 CAPLUS
CN Phosphonic acid, [2-[(acetyloxy)phenylmethyl]-4-oxo-4H-1-benzopyran-3-yl]-, dimethyl ester (9CI) (CA INDEX NAME)



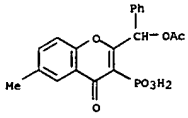
L3 ANSWER 5 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
RN 525599-85-3 CAPLUS
CN Phosphonic acid, [2-[(acetyloxy)phenylmethyl]-6-methyl-4-oxo-4H-1-benzopyran-3-yl]-, dimethyl ester (9CI) (CA INDEX NAME)



IT 525599-71-7P 525599-86-4P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
(preparation, derivatization and antitumor activity of substituted phosphonic derivs. of chromone)
RN 525599-71-7 CAPLUS
CN Phosphonic acid, [2-[(acetyloxy)phenylmethyl]-4-oxo-4H-1-benzopyran-3-yl]- (9CI) (CA INDEX NAME)

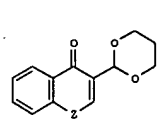


RN 525599-86-4 CAPLUS
CN Phosphonic acid, [2-[(acetyloxy)phenylmethyl]-6-methyl-4-oxo-4H-1-benzopyran-3-yl]- (9CI) (CA INDEX NAME)

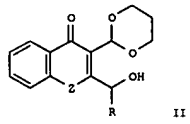


RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 6 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2002:438396 CAPLUS
DN 137:384770
TI Synthesis and cycloadditions of 9H-furo[3,4-b][1]benzo(thio)pyran-9-ones: furan ring formation by a novel hydrolytically induced cycloreversion
AU Daia, G. Elena; Gabbutt, Christopher D.; Hepworth, John D.; Heron, B. Mark; Hibbs, David E.; Hursthouse, Michael B.
CS Department of Chemistry, University of Hull, Hull, HU6 7RX, UK
SO Tetrahedron Letters (2002), 43(25), 4507-4510
CODEN: TELEAY; ISSN: 0040-4039
PB Elsevier Science Ltd.
DT Journal
LA English
OS CASREACT 137:384770
ED Entered STN: 11 Jun 2002
GI

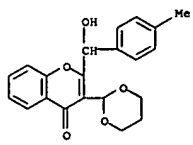


I



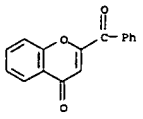
II

AB C-2 lithiation of acetals I followed by trapping with aldehydes gives II. Subsequent unmasking of the acetal function provides furobenzo(thio)pyrans, cycloaddns. of which have been investigated.
IT 203629-49-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis and cycloaddns. of 9H-furo[3,4-b][1]benzo(thio)pyran-9-ones via furan ring formation by hydrolytically induced cycloreversion)
RN 203629-49-6 CAPLUS
CN 4H-1-Benzopyran-4-one, 3-(1,3-dioxan-2-yl)-2-[hydroxy(4-methylphenyl)methyl]- (9CI) (CA INDEX NAME)

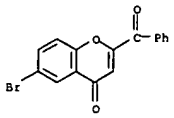


RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 7 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2002:229947 CAPLUS
DN 137:78836
TI Excellent paths for synthesis of 4-oxo-4H-1-benzopyrans with the aid of microwaves
AU Bratulescu, George
CS Faculte de Chimie, Universite de Craiova, Craiova, 1100, Rom.
SO Acta Chimica Slovenica (2002), 49(1), 173-180
CODEN: ACSLE7; ISSN: 1318-0207
PB Slovenian Chemical Society
DT Journal
LA French
OS CASREACT 137:78836
ED Entered STN: 27 Mar 2002
AB 4-Oxo-4H-1-benzopyran-2-carboxylic acid, 2-acetyl-4H-1-benzopyran-4-one and 2-benzoyl-4H-1-benzopyran-4-one derivs. were prepared in good yield on solid mineral supports or medium paste and under microwave irradiation in domestic ovens.
IT 51685-51-9P, 2-Benzoyl-4H-1-benzopyran-4-one 263259-66-1P , 2-Benzoyl-6-bromo-4H-1-Benzopyran-4-one
RL: SPN (Synthetic preparation); PREP (Preparation)
(microwave-mediated preparation of 4-oxo-4H-1-benzopyran-2-carboxylic acid and 4H-1-benzopyran-4-one derivs.)
RN 51685-51-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-benzoyl- (9CI) (CA INDEX NAME)



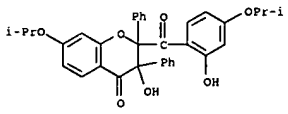
RN 263259-66-1 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-benzoyl-6-bromo- (9CI) (CA INDEX NAME)



RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 7 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

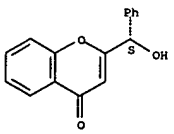
L3 ANSWER 8 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2001:790436 CAPLUS
DN 136:85693
TI Stability and chemical reactivity of 7-isopropoxyisoflavone (ipriflavone)
AU Varga, Marton; Batori, Sandor; Kovari-Radkai, Maria; Prohaszka-Nemet, Ildiko; Vitanyi-Morvai, Magdolna; Bocskey, Zsolt; Bokotey, Sandor; Simon, Kalman; Hermecz, Istvan
CS CHINOIN Pharmaceutical and Chemical Works Co. Ltd., Budapest, 1325, Hung.
SO European Journal of Organic Chemistry (2001), (20), 3911-3920
CODEN: EJOCFK; ISSN: 1434-193X
PB Wiley-VCH Verlag GmbH
DT Journal
LA English
OS CASREACT 136:85693
ED Entered STN: 31 Oct 2001
AB The stability (hydrolysis and oxidation) of ipriflavone (7-isopropoxyisoflavone) was studied under basic and acidic conditions in different solvents; the effects of irradiation were investigated in methanol.
Identification of the isolated products enabled suggestions to be made concerning the mechanisms of decomposition
IT 385818-28-0P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(crystal structure; hydrolysis, oxidation and photolysis of 7-isopropoxyisoflavone (ipriflavone))
RN 385818-28-0 CAPLUS
CN 4H-1-Benzopyran-4-one, 2,3-dihydro-3-hydroxy-2-[2-hydroxy-4-(1-methylethoxy)benzoyl]-7-(1-methylethoxy)-2,3-diphenyl- (9CI) (CA INDEX NAME)



RE.CNT 61 THERE ARE 61 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 9 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2000:130530 CAPLUS
DN 132:265063
TI Microbiological reductions of chromen-4-one derivatives
AU Besse, Pascale; Baziard-Mouysset, Genevieve; Boubekeur, Kamal; Palvadeau, Pierre; Veschambre, Henri; Payard, Marc; Mousset, Guy
CS Laboratoire de Synthese, Electrosynthese et Etude de Systemes a Interet Biologique, UMR 6504 du CNRS, Laboratoire de Synthese, Electrosynthese et Etude de Systemes a Interet Biologique, UMR 6504 du CNRS, Universite Blaise Pascal, Aubiere, 63177, Fr.
SO Tetrahedron: Asymmetry (1999), 10(24), 4745-4754
CODEN: TASYE3; ISSN: 0957-4166
PB Elsevier Science Ltd.
DT Journal
LA English
OS CASREACT 132:265063
ED Entered STN: 25 Feb 2000
AB From the microbiol. redns. of 2-acetyl- or 2-benzoylchromen-4-one both enantiomers of the corresponding alcs. were obtained with high enantiomeric excess. The absolute configurations were determined directly by x-ray anal. For most of the microorganisms tested, an inversion of configuration of the alc. occurred with a change of substituent (Me to Ph group) in position 2, and also with the presence of a bromine atom in position 6 of the aromatic ring, quite far from the prochiral center.
IT 263259-69-4P 263259-70-7P 263259-73-0P
RL: BPN (Biosynthetic preparation); BIOL (Biological study); PREP (Preparation)
(microbiol. redns. of chromen-4-one derivs.)
RN 263259-69-4 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-[(S)-hydroxyphenylmethyl]- (9CI) (CA INDEX NAME)

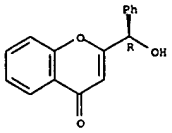
Absolute stereochemistry. Rotation (+).



RN 263259-70-7 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-[(R)-hydroxyphenylmethyl]- (9CI) (CA INDEX NAME)

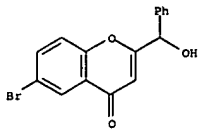
Absolute stereochemistry. Rotation (-).

L3 ANSWER 9 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

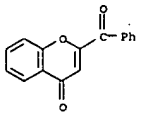


RN 263259-73-0 CAPLUS
CN 4H-1-Benzopyran-4-one, 6-bromo-2-(hydroxyphenylmethyl)-, (+)- (9CI) (CA INDEX NAME)

Rotation (+).

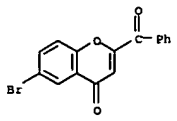


IT 51685-51-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(microbiol. redns. of chromen-4-one derivs.)
RN 51685-51-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-benzoyl- (9CI) (CA INDEX NAME)



IT 263259-66-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(microbiol. redns. of chromen-4-one derivs.)
RN 263259-66-1 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-benzoyl-6-bromo- (9CI) (CA INDEX NAME)

L3 ANSWER 9 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



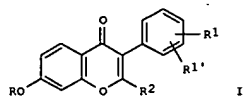
RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 10 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1998:485049 CAPLUS
DN 129:95354
TI Preparation and formulation of isoflavone derivatives for the prophylaxis and treatment of osteoporosis
IN Chiesi, Paolo; Ventura, Paolo; Servadio, Vittorino; Delcanale, Maurizio; Amari, Gabriele; Armani, Elisabetta; Civelli, Maurizio; Giossi, Massimo; Galbiatti, Elisabetta
PA Chiesi Farmaceutici S.P.A., Italy
SO PCT Int. Appl., 22 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

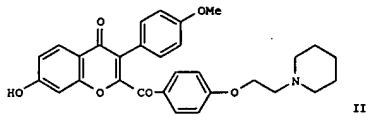
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9829403	A1	19980709	WO 1998-EP1	19980101
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
			IT 1997-MI3	A 19970103
AU 9862066	A1	19980731	AU 1998-62066	19980101
			IT 1997-MI3	A 19970103
			WO 1998-EP1	W 19980101
EP 954520	A1	19991110	EP 1998-904026	19980102
EP 954520	B1	20020410		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
			IT 1997-MI3	A 19970103
			WO 1998-EP1	W 19980101
HU 200000966	A2	20010528	HU 2000-966	19980102
			IT 1997-MI3	A 19970103
			WO 1998-EP1	W 19980101
AT 215941	E	20020415	AT 1998-904026	19980102
			IT 1997-MI3	A 19970103
			WO 1998-EP1	W 19980101
ES 2175661	T3	20021116	ES 1998-904026	19980102
			IT 1997-MI3	A 19970103

OS MARPAT 129:95354
ED Entered STN: 04 Aug 1998
GI

L3 ANSWER 10 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

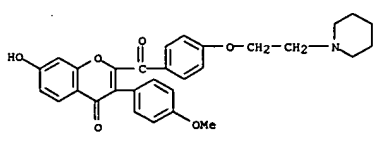


I



II

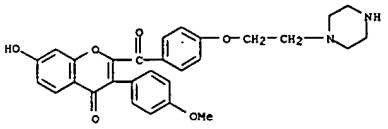
AB Isoflavones I [R = H, alkyl; R1 = H, OH, CF3, OCF3, halogen, alkyl, cycloalkyl, alkoxy; R1' = H, OH, halogen, alkyl, alkoxy; R2 = substituted benzoyl] were prepared for the prophylaxis and treatment of osteoporosis. Thus, isoflavone II.HCl, i.e. CHF 3290.01, was prepared starting from 4-MeOC6H4CH2CO2H, ClCOCO2Et, PhO(CH2)2Br, and piperidine. The prepared compds. showed good activity in inhibiting bone resorption.
IT 209669-43-2P, CHF 3290.01 209669-51-2P, CHF 3340.01
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation and formulation of isoflavone derivs. for the prophylaxis and treatment of osteoporosis)
RN 209669-43-2 CAPLUS
CN 4H-1-Benzopyran-4-one, 7-hydroxy-3-(4-methoxyphenyl)-2-[4-[2-(1-piperidinyl)ethoxy]benzoyl]-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

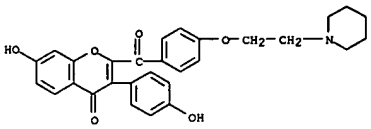
RN 209669-51-2 CAPLUS
CN 4H-1-Benzopyran-4-one, 7-hydroxy-3-(4-methoxyphenyl)-2-[4-[2-(1-piperazinyl)ethoxy]benzoyl]-, dihydrochloride (9CI) (CA INDEX NAME)

L3 ANSWER 10 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



●2 HCl

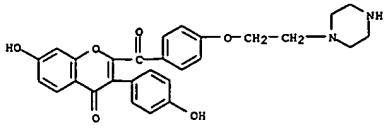
IT 209669-50-1P, CHF 3316.01 209669-52-3P, CHF 3356.01
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation and formulation of isoflavone derivs. for the prophylaxis and
treatment of osteoporosis)
RN 209669-50-1 CAPLUS
CN 4H-1-Benzopyran-4-one, 7-hydroxy-3-(4-hydroxyphenyl)-2-[4-[2-(1-piperidinyl)ethoxy]benzoyl]-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

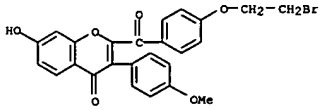
RN 209669-52-3 CAPLUS
CN 4H-1-Benzopyran-4-one, 7-hydroxy-3-(4-hydroxyphenyl)-2-[4-[2-(1-piperazinyl)ethoxy]benzoyl]-, dihydrochloride (9CI) (CA INDEX NAME)

L3 ANSWER 10 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



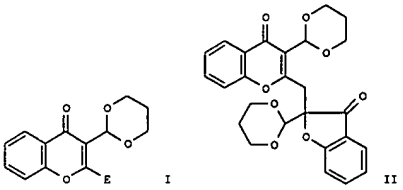
●2 HCl

IT 209624-98-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and formulation of isoflavone derivs. for the prophylaxis and
treatment of osteoporosis)
RN 209624-98-6 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-[4-(2-bromoethoxy)benzoyl]-7-hydroxy-3-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



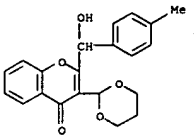
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 11 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1998:120912 CAPLUS
DN 128:192605
TI Directed lithiation of some 3-acylchromone acetals
AU Elena Daia, G.; Gabbutt, Christopher D.; Hepworth, John D.; Heron, B. Mark; Hibbs, David E.; Hursthouse, Michael B.
CS Dep. Chem., Univ. Central Lancashire, Preston, PR1 2HE, UK
SO Tetrahedron Letters (1998), 39(10), 1215-1218
CODEN: TELEAY; ISSN: 0040-4039
PB Elsevier Science Ltd.
DT Journal
LA English
ED Entered STN: 28 Feb 1998
GI



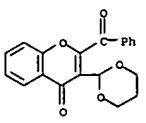
I II

AB 3-Acylchromone acetals, e.g., I (E = H), are lithiated at C-2. Subsequent
electrophilic trapping gives chromones, e.g., I [E = COOEt, SiMe3, CH(OH)Me], together with a ring-contracted dimer (II). During the formation of some acetals, an acid-catalyzed rearrangement to a 2-substituted 3-formylchromone acetal is observed
IT 203629-49-6P 203629-52-1P 203629-59-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(directed lithiation of 3-acylchromone acetals)
RN 203629-49-6 CAPLUS
CN 4H-1-Benzopyran-4-one, 3-(1,3-dioxan-2-yl)-2-[hydroxy(4-methylphenyl)methyl]- (9CI) (CA INDEX NAME)

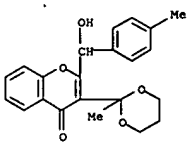


RN 203629-52-1 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-benzoyl-3-(1,3-dioxan-2-yl)- (9CI) (CA INDEX

L3 ANSWER 11 OF 35. CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
NAME)

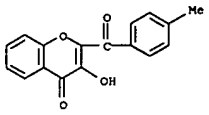


RN 203629-59-8 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-[hydroxy(4-methylphenyl)methyl]-3-(2-methyl-1,3-dioxan-2-yl)- (9CI) (CA INDEX NAME)

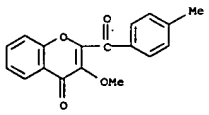


RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 12 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1996:116264 CAPLUS
DN 124:170641
TI New chromones from the roots of Mangifera indica
AU Khan, M. A.; Nizami, S. S.; Khan, M. N. I.; Azeem, S. W.
CS Department Chemistry, University Karachi, Karachi, 75270, Pak.
SO Fitoterapia (1995), 66(5), 423-4
CODEN: FTRPAE; ISSN: 0367-326X
PB Inverni della Beffa SpA
DT Journal
LA English
ED Entered STN: 24 Feb 1996
AB Two new chromones, 3-hydroxy-2-(4'-methylbenzoyl)-chromone and 3-methoxy-2-(4'-methylbenzoyl)-chromone were isolated from M. indica and their structures determined by spectroscopic studies.
IT 173866-78-9P 173866-79-0P
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP
(Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)
(chromones from Mangifera indica roots)
RN 173866-78-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 3-hydroxy-2-(4-methylbenzoyl)- (9CI) (CA INDEX NAME)



RN 173866-79-0 CAPLUS
CN 4H-1-Benzopyran-4-one, 3-methoxy-2-(4-methylbenzoyl)- (9CI) (CA INDEX NAME)



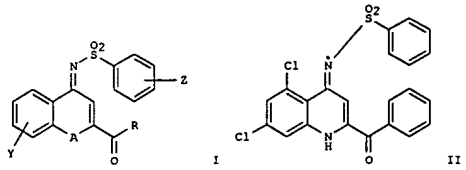
L3 ANSWER 13 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1995:761803 CAPLUS
DN 123:169527
TI Novel benzenesulfonylimine derivatives as inhibitors of IL-1 action
IN Harrison, Boyd L.; Ku, George; Meikrantz, Scott B.; Dalton, Christopher R.; Stemerick, David M.
PA Merrell Dow Pharmaceuticals Inc., USA
SO PCT Int. Appl., 44 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9514669	A1	19950601	WO 1994-US12658	19941103
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ, VN				
RW: KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
			US 1993-159014	A1 19931129
CA 2175458	AA	19950601	CA 1994-2175458	19941103
CA 2175458	C	19990302		
			US 1993-159014	A 19931129
AU 9510879	A1	19950613	AU 1995-10879	19941103
AU 683114	B2	19971030		
			US 1993-159014	A 19931129
			WO 1994-US12658	W 19941103
EP 731791	A1	19960918	EP 1995-901762	19941103
EP 731791	B1	19990303		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
			US 1993-159014	A 19931129
			WO 1994-US12658	W 19941103
CN 1136311	A	19961120	CN 1994-194304	19941103
CN 1044116	B	19990714		
			US 1993-159014	A 19931129
JP 09506345	T2	19970624	JP 1994-515081	19941103
			US 1993-159014	A 19931129
			WO 1994-US12658	W 19941103
HU 76273	A2	19970728	HU 1996-1435	19941103
HU 219565	B	20010528		
			US 1993-159014	A 19931129
AT 177083	E	19990315	AT 1995-901762	19941103
			US 1993-159014	A 19931129
ES 2131297	T3	19990716	ES 1995-901762	19941103
			US 1993-159014	A 19931129
			WO 1994-US12658	W 19941103
PT 731791	T	20001130	PT 1995-901762	19941103
			US 1993-159014	A 19931129
ZA 9409303	A	19950807	ZA 1994-9303	19941123
			US 1993-159014	A 19931129
IL 111776	A1	19990620	IL 1994-111776	19941127
			US 1993-159014	A 19931129

L3 ANSWER 13 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

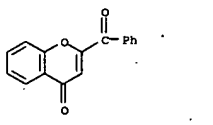
FI 9602235	A	19960528	FI 1996-2235	19960528
FI 109901	B1	20021031		
			US 1993-159014	A 19931129
			WO 1994-US12658	W 19941103
NO 9602155	A	19960528	NO 1996-2155	19960528
			US 1993-159014	A 19931129
			WO 1994-US12658	W 19941103
US 5684017	A	19971104	US 1996-649663	19960806
			US 1993-159014	B1 19931129
			WO 1994-US12658	W 19941103

OS MARPAT 123:169527
ED Entered STN: 29 Aug 1995
GI

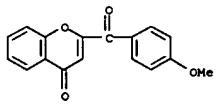


AB The invention relates to novel benzenesulfonylimine derivs. I [A = NH, O, S; R = C1-6 (cyclo)alkyl, Ph optionally substituted by 1-3 of: H, C1-4 alkyl or alkoxy, halo, NHAc, NH2, and OH; Z, Y each = 1-3 of: H, C1-4 alkyl or alkoxy, halo] and their use as inhibitors of interleukin-1 (IL-1) action. I are useful in the treatment of diseases including rheumatoid arthritis, multiple sclerosis, diabetes mellitus, atherosclerosis, septic shock, and pulmonary fibrosis. For example, 5,7-dichloro-4-(benzyloxy)quinoline-2-carboxylic acid chloride reacted with MeONHMe.HCl to give the corresponding N,O-di-Me hydroxamic acid, which reacted with PhMgBr in THF to give 5,7-dichloro-4-(benzyloxy)-2-benzoylquinoline. Debenzylation of the latter with CF3CO2H, and reaction of the resulting 1,4-dihydroquinolin-4-one derivative with PhSO2NCO in refluxing MeCN, gave title compound II. In a test for inhibition of endotoxin-induced release of IL-1β by human peripheral blood monocyte-derived macrophages, II had IC50 of 2 μM.
IT 51685-51-9P, 2-Benzoylchromone 80575-55-9P, 2-(4-Methoxybenzoyl)chromone 167026-14-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of benzenesulfonylimine derivs. as IL-1 inhibitors)
RN 51685-51-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-benzoyl- (9CI) (CA INDEX NAME)

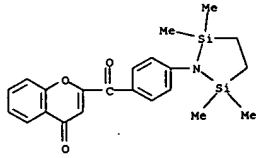
L3 ANSWER 13 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



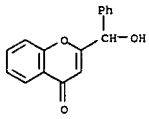
RN 80575-55-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-(4-methoxybenzoyl)- (9CI) (CA INDEX NAME)



RN 167026-14-4 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-[4-(2,2,5,5-tetramethyl-1-aza-2,5-disilacyclopent-1-yl)benzoyl]- (9CI) (CA INDEX NAME)

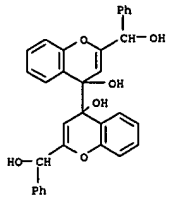


L3 ANSWER 14 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1993:29072 CAPLUS
DN 118:29072
TI Regioselective electrochemical reduction of 2-aroyl or 2-acetyl chromones in nonaqueous medium
AU Boutoute, Patrick; Mousset, Guy
CS Lab. Electrochim. Org., Univ. Blaise Pascal, Aubiere, 63177, Fr.
SO Canadian Journal of Chemistry (1992), 70(8), 2266-75
CODEN: CJCHAG; ISSN: 0008-4042
DT Journal
LA French
ED Entered STN: 24 Jan 1993
AB The electrochem. behavior of chromones substituted in position 2 by benzoyl or acetyl groups was studied by cyclic voltammetry in a nonaq. solvent. Self-protonation reactions were observed with compds. possessing a phenol function on the benzoyl group. Macroelectrolyses achieved in the presence of a proton donor afford a regioselective reduction of the carbonyl function in position 2 of the 2-benzoylchromone and of the double bond for the 2-acetylchromone. Moreover the further reduction gives thermally unstable dimers, which may give homolytic cleavage to free radicals.
IT 97208-42-9P 144993-27-1P 145192-59-2P
RL: FORM (Formation, nonpreparative); PREP (Preparation)
(formation of, in electrochem. reduction of chromone derivative, in DMF)
RN 97208-42-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-(hydroxyphenylmethyl)- (9CI) (CA INDEX NAME)

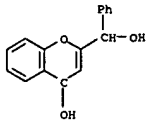


RN 144993-27-1 CAPLUS
CN [4,4'-Bi-4H-1-benzopyran]-2,2'-dimethanol, 4,4'-dihydroxy-α,α'-diphenyl- (9CI) (CA INDEX NAME)

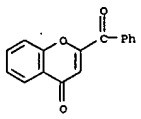
L3 ANSWER 14 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 145192-59-2 CAPLUS
CN 4H-1-Benzopyran-4-yl, 4-hydroxy-2-(hydroxyphenylmethyl)- (9CI) (CA INDEX NAME)

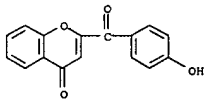


IT 51685-51-9 67652-25-9 67652-26-0
67652-27-1 145192-58-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(reduction of, electrochem., in DMF, regioselectivity in)
RN 51685-51-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-benzoyl- (9CI) (CA INDEX NAME)

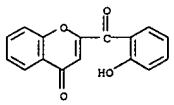


RN 67652-25-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-(4-hydroxybenzoyl)- (9CI) (CA INDEX NAME)

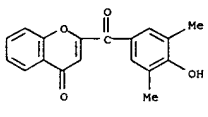
L3 ANSWER 14 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



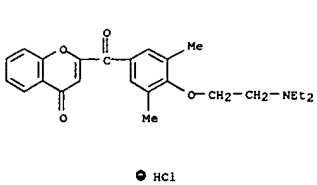
RN 67652-26-0 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-(2-hydroxybenzoyl)- (9CI) (CA INDEX NAME)



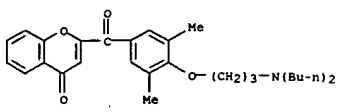
RN 67652-27-1 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-(4-hydroxy-3,5-dimethylbenzoyl)- (9CI) (CA INDEX NAME)



RN 145192-58-1 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-[4-[2-(diethylamino)ethoxy]-3,5-dimethylbenzoyl]-, hydrochloride (9CI) (CA INDEX NAME)



L3 ANSWER 15 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1991:135497 CAPLUS
DN 114:135497
TI Biodistribution and metabolism in rats and mice of bucromarone
AU Maurizis, J. C.; Nicolas, C.; Verny, M.; Ollier, M.; Faurie, M.; Payard, M.; Veyre, A.
CS Inst. Natl. Sante Rech. Med. U 71, Clermont-Ferrand, 63005, Fr.
SO Drug Metabolism and Disposition (1991), 19(1), 94-9
CODEN: DMDSAI; ISSN: 0090-9556
DT Journal
LA English
ED Entered STN: 19 Apr 1991
AB The metabolism and disposition of bucromarone, labeled with 14C on the chromone group, has been investigated in C3H mice and Wistar rats. Animals received 4.4 mmol/kg, i.v. or orally, of [14C]bucromarone hydrochloride or succinate. More than 90% of the administered radioactivity was excreted in bile. Less than 5 min after i.v. injection, the radioactivity was concentrated in all tissues, and blood concentration became very low as compared with the initial level. After oral administration, no more than 10% of the dose was in the tissues. The discrepancy between the high biliary excretion and the low tissue and blood concns. after oral administration suggested that bucromarone was well absorbed through the gastrointestinal tract; but after liver uptake, the drug and its metabolites were excreted in the bile with less than 10% being distributed into the extrahepatic blood. Comparison of the i.v. and oral areas under the plasma 14C-radioactivity concentration-time curves indicated a poor bioavailability of the drug after oral administration. Anal. of the radioactivity content of bile showed that bucromarone was extensively metabolized after administration by both routes. The unchanged bucromarone and three main metabolites, monodesbutylbucromarone, didesbutylbucromarone, and 2-(3,5-dimethyl-4-hydroxybenzoyl)chromone, amounting to 85% of the bile radioactivity, were identified by HPLC and mass spectrometry. These findings are consistent with dealkylation of the N-dibutyl group, yielding potentially pharmacol. active metabolites monodesbutyl and didesbutyl bucromarone.
IT 78371-66-1, Bucromarone 84604-94-4
RL: BIOL (Biological study)
(biodistribution and metabolism of, route of administration in relation to)
RN 78371-66-1 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-[4-[3-(dibutylamino)propoxy]-3,5-dimethylbenzoyl]- (9CI) (CA INDEX NAME)

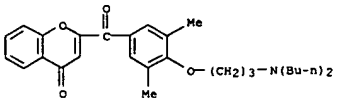


RN 84604-94-4 CAPLUS

L3 ANSWER 15 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
CN Butanedioic acid, compd. with 2-[4-[3-(dibutylamino)propoxy]-3,5-dimethylbenzoyl]-4H-1-benzopyran-4-one (1:1) (9CI) (CA INDEX NAME)

CM 1

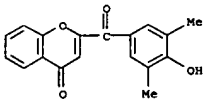
CRN 78371-66-1
CMF C29 H37 N O4



CM 2

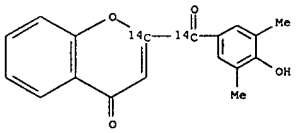
CRN 110-15-6
CMF C4 H6 O4

IT 67652-27-1 132732-92-4 132732-93-5
RL: PROC (Process)
(biodistribution of, as bucromarone metabolite)
RN 67652-27-1 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-(4-hydroxy-3,5-dimethylbenzoyl)- (9CI) (CA INDEX NAME)

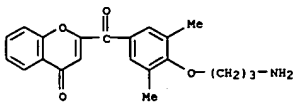


RN 132732-92-4 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-[4-(3-aminopropoxy)-3,5-dimethylbenzoyl]- (9CI) (CA INDEX NAME)

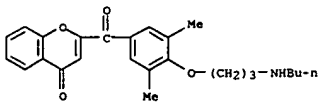
L3 ANSWER 15 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



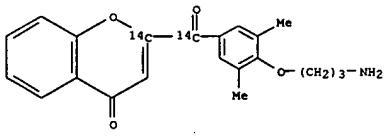
L3 ANSWER 15 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 132732-93-5 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-[4-[3-(butylamino)propoxy]-3,5-dimethylbenzoyl]- (9CI) (CA INDEX NAME)

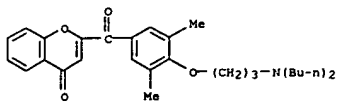


IT 132757-89-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 132757-89-2 CAPLUS
CN 4H-1-Benzopyran-4-one-2-14C, 2-[4-(3-aminopropoxy)-3,5-dimethylbenzoyl-carbonyl-14C]- (9CI) (CA INDEX NAME)



IT 107128-17-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with chloropropylamine derivative)
RN 107128-17-6 CAPLUS
CN 4H-1-Benzopyran-4-one-2-14C, 2-(4-hydroxy-3,5-dimethylbenzoyl-carbonyl-14C)- (9CI) (CA INDEX NAME)

L3 ANSWER 16 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1989:165395 CAPLUS
DN 110:165395
TI High-performance liquid chromatographic method for the radiometric determination of [14C]bucromarone in human plasma utilizing nonradiolabeled bucromarone as an internal standard
AU Everett, D. W.; Foley, J. E.; Singhvi, S. M.; Weinstein, S. H.; Warrington, S. J.
CS Squibb Inst. Med. Res., Princeton, NJ, 08543-4000, USA
SO Journal of Chromatography (1989), 487(2), 365-73
CODEN: JOCRAM; ISSN: 0021-9673
DT Journal
LA English
ED Entered STN: 12 May 1989
AB A novel radiometric HPLC method was developed for the determination of [14C]bucromarone in human plasma. The procedure involved the addition of nonradiolabeled bucromarone-HCl to each plasma sample as an internal standard; the plasma sample was then extracted, and the bucromarone was separated from its metabolites and endogenous compds. by reversed-phase HPLC. The concentration of [14C]bucromarone in each plasma sample was calculated from the ratio of the amount of radioactivity in the eluate fraction corresponding to bucromarone and the peak height of the UV absorbance (210 nm) of the nonradiolabeled bucromarone. The lower limit of quantitation for bucromarone free base in this assay was 8 ng/mL when [14C]bucromarone succinate had a specific activity of 0.5 μCi/mg. The coeffs. of variation for the exptl. determined concns. of bucromarone in spiked plasma samples were 6.8 and 14.3% at concns. of 80 and 20 ng/mL, resp. This method was used to determine concns. of bucromarone in the plasma of healthy volunteers who were given i.v. infusions of [14C]bucromarone succinate. In general, the methodol. should be applicable to any radiolabeled compound that possesses appreciable UV absorbance.
IT 78371-66-1
RL: ANT (Analyte); ANST (Analytical study)
(determination of, in blood plasma of humans by HPLC)
RN 78371-66-1 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-[4-[3-(dibutylamino)propoxy]-3,5-dimethylbenzoyl]- (9CI) (CA INDEX NAME)

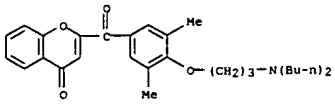


IT 119963-87-0
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL

L3 ANSWER 16 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
(Biological study); PROC (Process)
(pharmacokinetics of, in humans, radiolabeled compd. detn. in)
RN 119963-87-0 CAPLUS
CN Butanedioic acid, compd. with 2-[4-[3-(dibutylamino)propoxy]-3,5-dimethylbenzoyl]-4H-1-benzopyran-4-one (9CI) (CA INDEX NAME)

CM 1

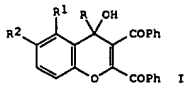
CRN 78371-66-1
CMF C29 H37 N O4



CM 2

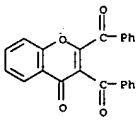
CRN 110-15-6
CMF C4 H6 O4

L3 ANSWER 17 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1988:185954 CAPLUS
DN 108:185954
TI Phototransformations of benzopyranols and related systems. Steady-state and laser flash photolysis studies
AU Ramaiah, D.; Scaria, P. M.; Cyr, D. R.; Das, P. K.; George, M. V.
CS Dep. Chem., Indian Inst. Technol., Kanpur, 208016, India
SO Journal of Organic Chemistry (1988), 53(9), 2016-22
CODEN: JOCEAH; ISSN: 0022-3263
DT Journal
LA English
OS CASREACT 108:185954
ED Entered STN: 28 May 1988
GI

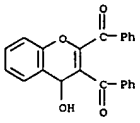


AB The phototransformations of 4-benzopyranol systems I [R-R2 = H; R = Me, R1 = R2 = H; R = H, R1R2 = (CH:CH)2], incorporating the 1,2-dibenzoylalkene moiety, have been studied by steady-state photolysis, product anal., and nanosecond laser flash photolysis. Under direct photolysis, prototropic reactions leading to 2-pyranols and/or their methoxy analogs dominate, presumably through the intermediacy of carbocations produced as a result of photodehydroxylation. No products, e.g., butenoic acid/ester derivs., attributable to intramol. Ph group migration along the 1,2-dibenzoylalkene moiety, are observed The laser flash photolysis of 4- and 2-pyranols in PhH or MeOH shows the formation of triplets, characterized by unusually short lifetimes (< 1 μs), which testifies to the reactive nature of the triplets. In addition, in the case of 2-pyranols, longer-lived transient species characterized by absorptions at long wavelengths (700-800 nm) are observed; these are best assigned as biradicals, produced as a result of ring opening via triplet-mediated C2-O bond cleavage.
IT 5530-10-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and attempted photolysis of)
RN 5530-10-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 2,3-dibenzoyl- (9CI) (CA INDEX NAME)

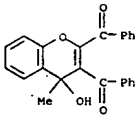
L3 ANSWER 17 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



IT 113810-85-8P 113810-86-9P 113810-87-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and photolysis of, mechanism of)
RN 113810-85-8 CAPLUS
CN Methanone, (4-hydroxy-4H-1-benzopyran-2,3-diyl)bis[phenyl- (9CI) (CA INDEX NAME)

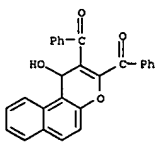


RN 113810-86-9 CAPLUS
CN Methanone, (4-hydroxy-4-methyl-4H-1-benzopyran-2,3-diyl)bis[phenyl- (9CI) (CA INDEX NAME)

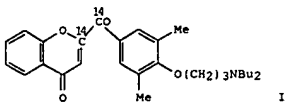


RN 113810-87-0 CAPLUS
CN Methanone, (1-hydroxy-1H-naphtho[2,1-b]pyran-2,3-diyl)bis[phenyl- (9CI) (CA INDEX NAME)

L3 ANSWER 17 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

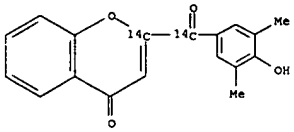


L3 ANSWER 18 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1987:119624 CAPLUS
DN 106:119624
TI Synthesis of 14C-bucromarone succinate and hydrochloride
AU Nicolas, Colette; Verny, Michel; Maurizis, Jean Claude; Payard, Marc; Faurie, Michel
CS INSERM U 71, Clemont-Ferrand, 63005, Fr.
SO Journal of Labelled Compounds and Radiopharmaceuticals (1986), 23(8), 837-44
CODEN: JLCRD4; ISSN: 0362-4803
DT Journal
LA English
OS CASREACT 106:119624
ED Entered STN: 17 Apr 1987
GI



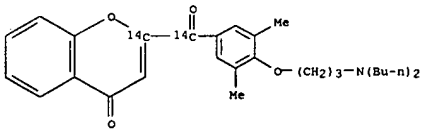
I

AB 14C-bucromarone I was prepared from HO214C14CO2H. The labeling took place
at the first step of the synthesis, and 14C-bucromarone succinate, with a specific activity of 7.45 mCi/mmol, and 14C-bucromarone hydrochloride, with a specific activity of 7.5 mCi/mmol, were obtained.
IT 107128-17-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and condensation of, with (dibutylamino)propyl chloride, labeled bucromarone from)
RN 107128-17-6 CAPLUS
CN 4H-1-Benzopyran-4-one-2-14C, 2-(4-hydroxy-3,5-dimethylbenzoyl-carbonyl-14C)- (9CI) (CA INDEX NAME)



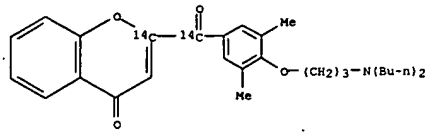
IT 107128-18-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and conversion to labeled bucromarone succinate and hydrochloride)

L3 ANSWER 18 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● HCl

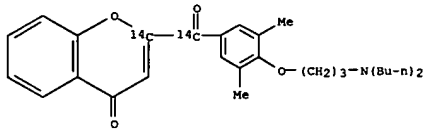
L3 ANSWER 18 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
RN 107128-18-7 CAPLUS
CN 4H-1-Benzopyran-4-one-2-14C, 2-[4-[3-(dibutylamino)propoxy]-3,5-dimethylbenzoyl-carbonyl-14C]- (9CI) (CA INDEX NAME)



IT 107128-19-8P 107128-20-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 107128-19-8 CAPLUS
CN Butanedioic acid, compd. with 2-[4-[3-(dibutylamino)propoxy]-3,5-dimethylbenzoyl-carbonyl-14C]-4H-1-benzopyran-4-one-2-14C (1:1) (9CI) (CA
INDEX NAME)

CM 1

CRN 107128-18-7
CMF C29 H37 N O4



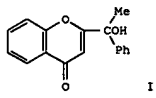
CM 2

CRN 110-15-6
CMF C4 H6 O4

$HO_2C-CH_2-CH_2-CO_2H$

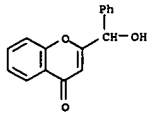
RN 107128-20-1 CAPLUS
CN 4H-1-Benzopyran-4-one-2-14C, 2-(4-[3-(dibutylamino)propoxy]-3,5-dimethylbenzoyl-carbonyl-14C)-, hydrochloride (9CI) (CA INDEX NAME)

L3 ANSWER 19 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1985:432076 CAPLUS
DN 103:32076
TI Antiallergic agents: derivatives of 2-hydroxymethylchromone and structural
analogs
AU Payard, Marc; Mouysset, Genevieve; Tronche, Pierre; Bastide, Pierre; Bastide, Janine
CS Dep. Chim. Pharm., Fac. Pharm., Toulouse, 31400, Fr.
SO European Journal of Medicinal Chemistry (1985), 20(2), 117-20
CODEN: EJMCA5; ISSN: 0223-5234
DT Journal
LA French
OS CASREACT 103:32076
ED Entered STN: 10 Aug 1985
GI



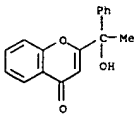
I

AB 2-(Hydroxymethyl)chromone [59749-54-1] and the majority of 8 related compds. (including a chroman and a benzodioxan) tested had antiallergic activity in mice, as measured by inhibition of passive cutaneous anaphylaxis. The activity was equal to or greater than that of the reference
compound, Na cromoglycate, and was observed after either oral or i.p. administration. The most active compound was 2-(1-hydroxy-1-methylbenzyl)chromone (I) [97208-43-0]. The compds. showed
little or no activity in 2 tests for H1-antihistaminic properties. The preparation (mainly by catalytic reduction of the corresponding side-chain-oxidized
compds.) and phys. properties of the substances are given.
IT 97208-42-9P 97208-43-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and antiallergic and antihistaminic activities of)
RN 97208-42-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-(hydroxyphenylmethyl)- (9CI) (CA INDEX NAME)

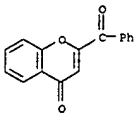


RN 97208-43-0 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-(1-hydroxy-1-phenylethyl)- (9CI) (CA INDEX NAME)

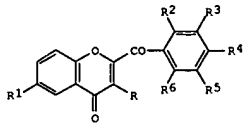
L3 ANSWER 19 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



IT 51685-51-9
RL: BIOL (Biological study)
(reduction and Grignard rearrangement of)
RN 51685-51-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-benzoyl- (9CI) (CA INDEX NAME)



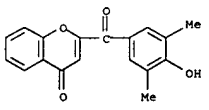
L3 ANSWER 20 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1982:52132 CAPLUS
DN 96:52132
TI New synthesis of 2-aroylchromones. Pharmacological study of some derivatives
AU Payard, Marc; Tronche, Pierre; Bastide, Janine; Bastide, Pierre; Chavernac, Gilles
CS Lab. Chim. Org., Fac. Sci. Pharmaceut., Toulouse, 31400, Fr.
SO European Journal of Medicinal Chemistry (1981), 16(5), 453-70
CODEN: EJMCA5; ISSN: 0009-4374
DT Journal
LA French
OS CASREACT 96:52132
ED Entered STN: 12 May 1984
GI



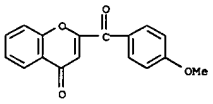
I

AB The reaction of chromonecarbonyl chlorides with benzenes give title compds. I (R = H, Me; R1 = H, Cl, Br, Me, F, NO2; R2 = H, OMe, OH; R3 = H, Me, Br, Cl; R4 = H, OMe, OH, F, Cl, Br; R5 = H, Me, Br; R6 = H, OMe, OH), which showed anti-allergic, antiparkinsonian, analgesic, anticonvulsant, sedative, and hypothermia-inducing activity. Chromone-2-carbonyl chloride was treated with C6H6 and AlCl3 at <10° to give I (R = R1 = R2 = R3 = R4 = R5 = R6 = H).
IT 67652-27-1P 80575-55-9P 80575-56-0P
80575-57-1P 80575-60-6P 80575-63-9P
80575-71-9P 80575-72-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and anti-allergic activity of)
RN 67652-27-1 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-(4-hydroxy-3,5-dimethylbenzoyl)- (9CI) (CA INDEX NAME)

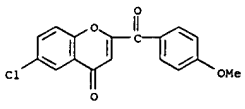
L3 ANSWER 20 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



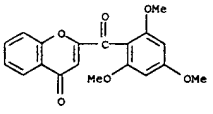
RN 80575-55-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-(4-methoxybenzoyl)- (9CI) (CA INDEX NAME)



RN 80575-56-0 CAPLUS
CN 4H-1-Benzopyran-4-one, 6-chloro-2-(4-methoxybenzoyl)- (9CI) (CA INDEX NAME)

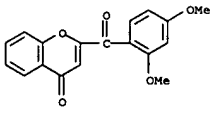


RN 80575-57-1 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-(2,4,6-trimethoxybenzoyl)- (9CI) (CA INDEX NAME)

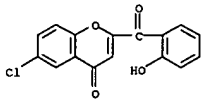


RN 80575-60-6 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-(2,4-dimethoxybenzoyl)- (9CI) (CA INDEX NAME)

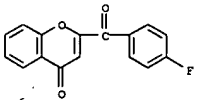
L3 ANSWER 20 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



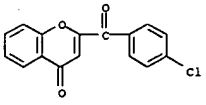
RN 80575-63-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 6-chloro-2-(2-hydroxybenzoyl)- (9CI) (CA INDEX NAME)



RN 80575-71-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-(4-fluorobenzoyl)- (9CI) (CA INDEX NAME)

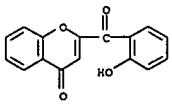


RN 80575-72-0 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-(4-chlorobenzoyl)- (9CI) (CA INDEX NAME)

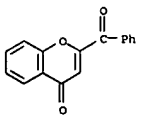


IT 67652-26-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and antiparkinsonian activity of)
RN 67652-26-0 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-(2-hydroxybenzoyl)- (9CI) (CA INDEX NAME)

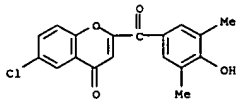
L3 ANSWER 20 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



IT 51685-51-9P 80575-70-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and pharmacol. activity of)
RN 51685-51-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-benzoyl- (9CI) (CA INDEX NAME)

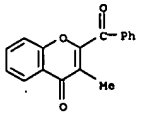


RN 80575-70-8 CAPLUS
CN 4H-1-Benzopyran-4-one, 6-chloro-2-(4-hydroxy-3,5-dimethylbenzoyl)- (9CI) (CA INDEX NAME)

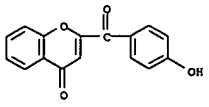


IT 20924-66-7P 67652-25-9P 71581-85-6P
71581-86-7P 76733-04-5P 80575-54-8P
80575-58-2P 80575-59-3P 80575-61-7P
80575-62-8P 80575-64-0P 80575-65-1P
80575-66-2P 80575-67-3P 80575-68-4P
80575-69-5P 80575-73-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 20924-66-7 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-benzoyl-3-methyl- (9CI) (CA INDEX NAME)

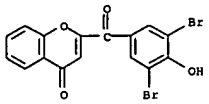
L3 ANSWER 20 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



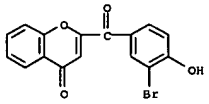
RN 67652-25-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-(4-hydroxybenzoyl)- (9CI) (CA INDEX NAME)



RN 71581-85-6 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-(3,5-dibromo-4-hydroxybenzoyl)- (9CI) (CA INDEX NAME)

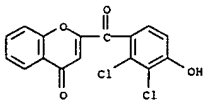


RN 71581-86-7 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-(3-bromo-4-hydroxybenzoyl)- (9CI) (CA INDEX NAME)

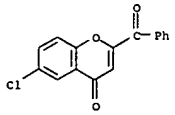


RN 76733-04-5 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-(2,3-dichloro-4-hydroxybenzoyl)- (9CI) (CA INDEX

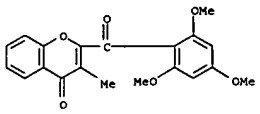
L3 ANSWER 20 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
NAME)



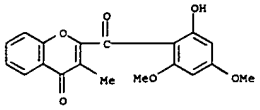
RN 80575-54-8 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-benzoyl-6-chloro- (9CI) (CA INDEX NAME)



RN 80575-58-2 CAPLUS
CN 4H-1-Benzopyran-4-one, 3-methyl-2-(2,4,6-trimethoxybenzoyl)- (9CI) (CA INDEX NAME)

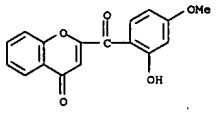


RN 80575-59-3 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-(2-hydroxy-4,6-dimethoxybenzoyl)-3-methyl- (9CI) (CA INDEX NAME)

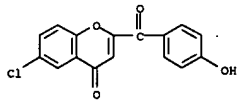


RN 80575-61-7 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-(2-hydroxy-4-methoxybenzoyl)- (9CI) (CA INDEX NAME)

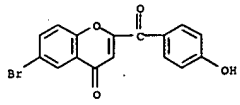
L3 ANSWER 20 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



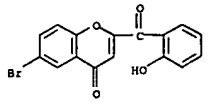
RN 80575-62-8 CAPLUS
CN 4H-1-Benzopyran-4-one, 6-chloro-2-(4-hydroxybenzoyl)- (9CI) (CA INDEX NAME)



RN 80575-64-0 CAPLUS
CN 4H-1-Benzopyran-4-one, 6-bromo-2-(4-hydroxybenzoyl)- (9CI) (CA INDEX NAME)

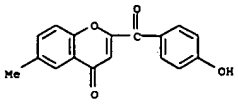


RN 80575-65-1 CAPLUS
CN 4H-1-Benzopyran-4-one, 6-bromo-2-(2-hydroxybenzoyl)- (9CI) (CA INDEX NAME)

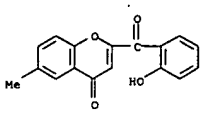


RN 80575-66-2 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-(4-hydroxybenzoyl)-6-methyl- (9CI) (CA INDEX NAME)

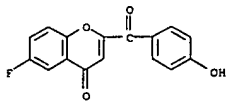
L3 ANSWER 20 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



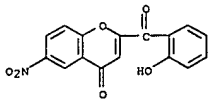
RN 80575-67-3 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-(2-hydroxybenzoyl)-6-methyl- (9CI) (CA INDEX NAME)



RN 80575-68-4 CAPLUS
CN 4H-1-Benzopyran-4-one, 6-fluoro-2-(4-hydroxybenzoyl)- (9CI) (CA INDEX NAME)

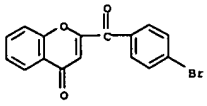


RN 80575-69-5 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-(2-hydroxybenzoyl)-6-nitro- (9CI) (CA INDEX NAME)

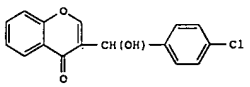


RN 80575-73-1 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-(4-bromobenzoyl)- (9CI) (CA INDEX NAME)

L3 ANSWER 20 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

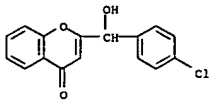


L3 ANSWER 21 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1982:487 CAPLUS
DN 96:487
TI Hemodynamic effects of a benzopyrone analog of cloridarol
AU Eschalier, A.; Payard, M.
CS Dep. Pharmacol., Fac. Med., Clermont-Ferrand, 63001, Fr.
SO IRCS Medical Science: Library Compendium (1981), 9(6), 487
CODEN: IRLCDZ; ISSN: 0305-6651
DT Journal
LA English
ED Entered STN: 12 May 1984
GI

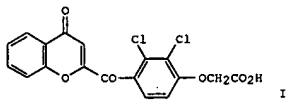


I

AB 2-(α-hydroxy-4-chlorobenzyl)chromone (I) [79347-96-9] (a benzopyranone derivative of cloridarol) at 10 mg/kg increased arterial coronary and aortic blood flow in dogs without increasing cardiac work, and decreased arterial blood pressure, the decrease being more pronounced with diastolic than with systolic pressures. This peripheral vasodilator action of I may explain the increase in aortic blood flow due to a lowering of afterload and the rise in coronary blood flow by coronary dilation. Qual. similarities between I and cloridarol may be due to the structural analogy between the benzofuran ring and the chromone nucleus.
IT 79347-96-9
RL: PRP (Properties)
(hemodynamic effects of)
RN 79347-96-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-[(4-chlorophenyl)hydroxymethyl]- (9CI) (CA INDEX NAME)

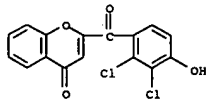


L3 ANSWER 22 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1981:114405 CAPLUS
DN 94:114405
TI Diuretic properties of a new acylaryloxyacetic acid: 2-(2',3'-dichloro-4'-carboxymethylene oxybenzoyl)-chromone
AU Eschalier, A.; Payardt, M.; Gachon, P.
CS Lab. Pharmacol. Med., Fac. Med., Clermont-Ferrand, Fr.
SO Arzneimittel-Forschung (1980), 30(12), 2124-6
CODEN: ARZNAD; ISSN: 0004-4172
DT Journal
LA English
ED Entered STN: 12 May 1984
GI



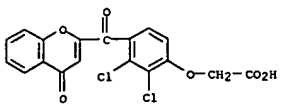
I

AB 2-(2',3'-Dichloro-4'-carboxymethylene oxybenzoyl)chromone (I) [76733-03-4] was synthesized and exhibited weak but significant diuretic activity in dogs when compared with thienylate. The synthesis was carried out in three steps: a Friedel-Crafts acylation of 2,3-dichlorophenol [576-24-9] with chromone carboxylic acid chloride [5112-47-0] followed by alkylation and hydrolysis.
IT 76733-04-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and alkylation by Et bromoacetate)
RN 76733-04-5 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-(2,3-dichloro-4-hydroxybenzoyl)- (9CI) (CA INDEX NAME)

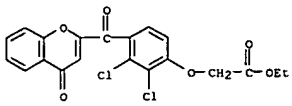


IT 76733-03-4P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation and diuretic activity of)
RN 76733-03-4 CAPLUS
CN Acetic acid, [2,3-dichloro-4-[(4-oxo-4H-1-benzopyran-2-

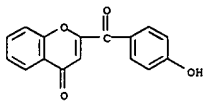
L3 ANSWER 22 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
yl)carbonyl]phenoxy]- (9CI) (CA INDEX NAME)



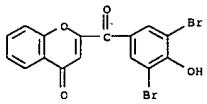
IT 76733-05-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and hydrolysis of)
RN 76733-05-6 CAPLUS
CN Acetic acid, [2,3-dichloro-4-[(4-oxo-4H-1-benzopyran-2-yl)carbonyl]phenoxy]-, ethyl ester (9CI) (CA INDEX NAME)



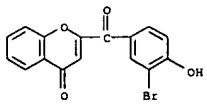
L3 ANSWER 23 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



IT 71581-85-6P 71581-86-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and use of, in gout treatment)
RN 71581-85-6 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-(3,5-dibromo-4-hydroxybenzoyl)- (9CI) (CA INDEX NAME)



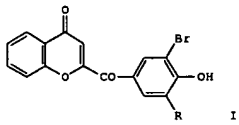
RN 71581-86-7 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-(3-bromo-4-hydroxybenzoyl)- (9CI) (CA INDEX NAME)



L3 ANSWER 23 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1979:575199 CAPLUS
DN 91:175199
TI Chromone derivatives
IN Chibret, Henri
PA THEA (Therapeutique et Applications) S. A., Fr.
SO Ger. Offen., 17 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
PI	DE 2900656	A1	19790719	DE 1979-2900656		19790110
	DE 2900656	C2	19870326			
				FR 1978-1154	A	19780117
				FR 1978-36421	A	19781227
	FR 2414506	A1	19790810	FR 1978-1154		19780117
	FR 2414506	B1	19800704			
					A	
	FR 2445326	A2	19800725	FR 1978-36421		19781227
	FR 2445326	B2	19810227			
					A	
	JP 54112871	A2	19790904	JP 1979-4411		19790117
	JP 61060837	B4	19861223			
				FR 1978-1154	A	19780117
				FR 1978-36421	A	19781227

ED Entered STN: 12 May 1984
GI



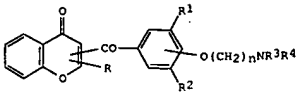
AB The chromone derivs. I (R = H, Br) were prepared by the bromination of 2-(p-hydroxybenzoyl)chromone. I are useful for the treatment of gout (test data tabulated).
IT 67652-25-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and bromination of)
RN 67652-25-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-(4-hydroxybenzoyl)- (9CI) (CA INDEX NAME)

L3 ANSWER 24 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1978:529403 CAPLUS
DN 89:129403
TI Chromone derivatives
PA THEA (Therapeutique et Applications) S. A., Fr.
SO Ger. Offen., 24 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

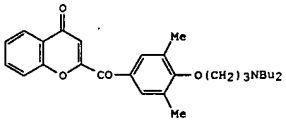
	PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
PI	DE 2800015	A1	19780713	DE 1978-2800015		19780102
				FR 1977-10	A	19770103
	FR 2376145	A1	19780728	FR 1977-10		19770103
	FR 2376145	B1	19800328			
					A	
	JP 53084976	A2	19780726	JP 1977-157571		19771228
	JP 61021234	B4	19860526			
				FR 1977-10	A	19770103
	US 4220645	A	19800902	US 1977-865573		19771229
				FR 1977-10	A	19770103
	BE 862569	A1	19780630	BE 1977-184052		19771230
				FR 1977-10	A	19770103
	GB 1596929	A	19810903	GB 1977-54223		19771230
				FR 1977-10	A	19770103
	DK 7800008	A	19780704	DK 1978-8		19780102
				FR 1977-10	A	19770103
	SE 7800033	A	19780704	SE 1978-33		19780102
	SE 438857	B	19850513			
	SE 438857	C	19850822			
				FR 1977-10	A	19770103
	NL 7800001	A	19780705	NL 1978-1		19780102
				FR 1977-10	A	19770103
	ES 466168	A1	19790701	ES 1978-466168		19780102
				FR 1977-10	A	19770103
	ZA 7800002	A	19781025	ZA 1978-2		19780103
				FR 1977-10	A	19770103
	AU 7832117	A1	19790712	AU 1978-32117		19780103
	AU 518897	B2	19811029			
				FR 1977-10	A	19770103
	CA 1129875	A1	19820817	CA 1978-294226		19780103
				FR 1977-10	A	19770103
	CH 631713	A	19820831	CH 1978-13		19780103
				FR 1977-10	A	19770103

OS MARPAT 89:129403
ED Entered STN: 12 May 1984
GI

L3 ANSWER 24 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



I

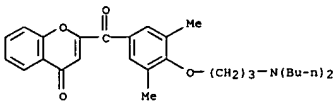


II

AB The benzoylchromones I (R = R1 = R2 = H, lower alkyl; R3 = R4 = H, alkyl, cycloalkyl, hydroxyalkyl; NR3R4 = heterocycle; n = 1-5) were prepared for treatment heart diseases. Thus, acylating 2,6-Me2C6H4OH with 2-(chlorocarbonyl)chromone and AlCl3, and then treating with Bu2N(CH2)3Cl gave 80% II, which showed antiarrhythmic, sympathicoinhibiting, and bradykinin activity in dogs.

IT 67652-33-9P 67652-39-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and antiarrhythmic activity of)

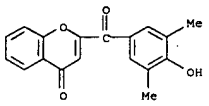
RN 67652-33-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-[4-[3-(dibutylamino)propoxy]-3,5-dimethylbenzoyl]-, hydrochloride (9CI) (CA INDEX NAME)



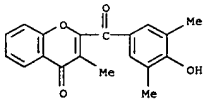
● HCl

RN 67652-39-5 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-[4-[2-(dibutylamino)ethoxy]-3,5-dimethylbenzoyl]-, hydrochloride (9CI) (CA INDEX NAME)

L3 ANSWER 24 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

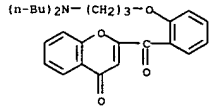


RN 67652-28-2 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-(4-hydroxy-3,5-dimethylbenzoyl)-3-methyl- (9CI) (CA INDEX NAME)



IT 67652-35-1P 67652-36-2P 67652-37-3P
67652-38-4P 67652-40-8P 67652-41-9P
67652-42-0P 67652-43-1P 67652-44-2P
67652-45-3P 67652-46-4P 67652-47-5P
67652-48-6P 67652-49-7P 67652-50-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

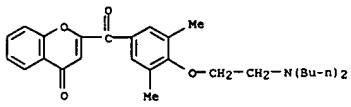
RN 67652-35-1 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-[2-[3-(dibutylamino)propoxy]benzoyl]-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 67652-36-2 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-[4-[2-(diethylamino)ethoxy]benzoyl]-, hydrochloride (9CI) (CA INDEX NAME)

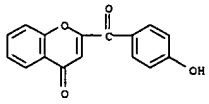
L3 ANSWER.24 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



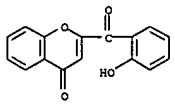
● HCl

IT 67652-25-9P 67652-26-0P 67652-27-1P
67652-28-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, with haloalkylamines)

RN 67652-25-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-(4-hydroxybenzoyl)- (9CI) (CA INDEX NAME)

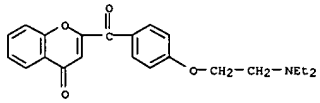


RN 67652-26-0 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-(2-hydroxybenzoyl)- (9CI) (CA INDEX NAME)



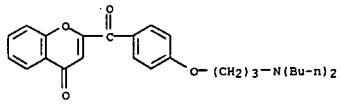
RN 67652-27-1 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-(4-hydroxy-3,5-dimethylbenzoyl)- (9CI) (CA INDEX NAME)

L3 ANSWER 24 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



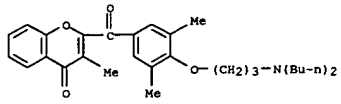
● HCl

RN 67652-37-3 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-[4-[3-(dibutylamino)propoxy]benzoyl]-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

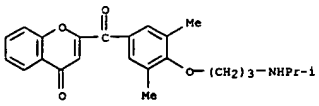
RN 67652-38-4 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-[4-[3-(dibutylamino)propoxy]-3,5-dimethylbenzoyl]-3-methyl-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

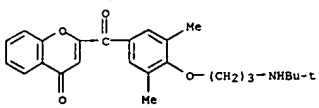
RN 67652-40-8 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-[3,5-dimethyl-4-[3-[(1-methylethyl)amino]propoxy]benzoyl]-, hydrochloride (9CI) (CA INDEX NAME)

L3 ANSWER 24 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



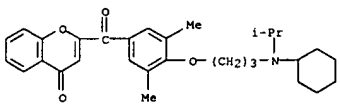
● HCl

RN 67652-41-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-[4-[3-[(1,1-dimethylethyl)amino]propoxy]-3,5-dimethylbenzoyl]-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

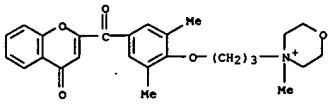
RN 67652-42-0 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-[4-[3-[cyclohexyl(1-methylethyl)amino]propoxy]-3,5-dimethylbenzoyl]-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

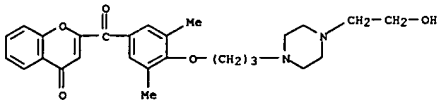
RN 67652-43-1 CAPLUS
CN Morpholinium, 4-[3-[2,6-dimethyl-4-[(4-oxo-4H-1-benzopyran-2-yl)carbonyl]phenoxy]propyl]-4-methyl-, iodide (9CI) (CA INDEX NAME)

L3 ANSWER 24 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



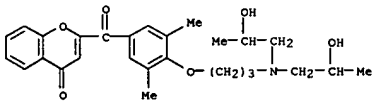
● I⁻

RN 67652-44-2 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-[4-[3-[4-(2-hydroxyethyl)-1-piperazinyl]propoxy]-3,5-dimethylbenzoyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

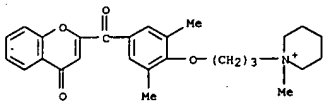
RN 67652-45-3 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-[4-[3-[bis(2-hydroxypropyl)amino]propoxy]-3,5-dimethylbenzoyl]-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

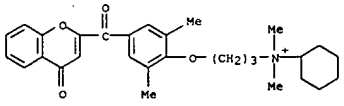
RN 67652-46-4 CAPLUS
CN Piperidinium, 1-[3-[2,6-dimethyl-4-[(4-oxo-4H-1-benzopyran-2-yl)carbonyl]phenoxy]propyl]-1-methyl-, iodide (9CI) (CA INDEX NAME)

L3 ANSWER 24 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



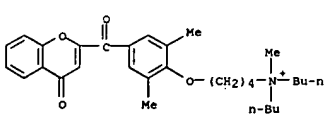
● I⁻

RN 67652-47-5 CAPLUS
CN Cyclohexanaminium, N-[3-[2,6-dimethyl-4-[(4-oxo-4H-1-benzopyran-2-yl)carbonyl]phenoxy]propyl]-N,N-dimethyl-, iodide (9CI) (CA INDEX NAME)



● I⁻

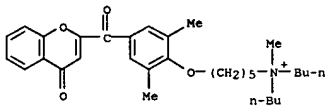
RN 67652-48-6 CAPLUS
CN 1-Butanaminium, N,N-dibutyl-4-[2,6-dimethyl-4-[(4-oxo-4H-1-benzopyran-2-yl)carbonyl]phenoxy]-N-methyl-, iodide (9CI) (CA INDEX NAME)



● I⁻

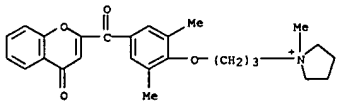
RN 67652-49-7 CAPLUS
CN 1-Pentanaminium, N,N-dibutyl-5-[2,6-dimethyl-4-[(4-oxo-4H-1-benzopyran-2-yl)carbonyl]phenoxy]-N-methyl-, iodide (9CI) (CA INDEX NAME)

L3 ANSWER 24 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



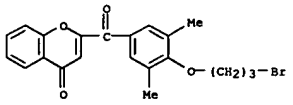
● I⁻

RN 67652-50-0 CAPLUS
CN Pyrrolidinium, 1-[3-[2,6-dimethyl-4-[(4-oxo-4H-1-benzopyran-2-yl)carbonyl]phenoxy]propyl]-1-methyl-, iodide (9CI) (CA INDEX NAME)



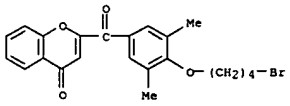
● I⁻

IT 67652-30-6P 67652-31-7P 67652-32-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, and reaction with amines)
RN 67652-30-6 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-[4-(3-bromopropoxy)-3,5-dimethylbenzoyl]- (9CI) (CA INDEX NAME)

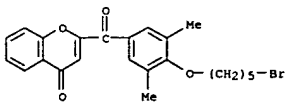


RN 67652-31-7 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-[4-(4-bromobutoxy)-3,5-dimethylbenzoyl]- (9CI) (CA INDEX NAME)

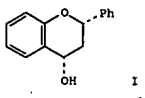
L3 ANSWER 24 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 67652-32-8 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-[4-[(5-bromopentyl)oxy]-3,5-dimethylbenzoyl]-(9CI) (CA INDEX NAME)

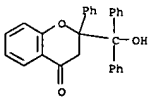


L3 ANSWER 25 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1977:468088 CAPLUS
DN 87:68088
TI Photochemical reactions of 4-flavanols in the presence of ketone sensitizers
AU Suzuki, Morio; Amano, Jiro; Morioka, Motonobu; Mizuno, Hideo; Matsushima, Ryoka
CS Fac. Eng., Shizuoka Univ., Hamamatsu, Japan
SO Bulletin of the Chemical Society of Japan (1977), 50(5), 1169-72
CODEN: BCSJA8; ISSN: 0009-2673
DT Journal
LA English
OS CASREACT 87:68088
ED Entered STN: 12 May 1984
GI



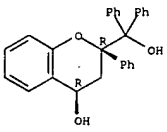
AB Irradiation of an O-free C6H6 solution of cis-4-flavanol (I) by a mercury lamp in the presence of PhCOPh gave 4-flavanone (32%), benzopinacol (85%), cis- and trans-2-(diphenylhydroxymethyl)-4-flavanols (7.6%), and 2-(diphenylhydroxymethyl)-4-flavanone (7.7%), whereas photolysis of cis-4-acetoxyflavane under similar conditions gave cis-2-(diphenylhydroxymethyl)-4-acetoxyflavane (24%), 2,2'-bi-4-acetoxyflavane (6%), and benzopinacol. Photolysis of I in Me2CO gave 4-flavanone (3.6%) and trans-4-(1-hydroxy-1-methylethyl)-4-flavanols (9.9%). The cis isomers of the parent and substituted 4-flavanols showed higher reactivities than the corresponding trans isomers.
IT 63483-25-0P 63483-26-1P 63483-27-2P 63483-28-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 63483-25-0 CAPLUS
CN 4H-1-Benzopyran-4-one, 2,3-dihydro-2-(hydroxydiphenylmethyl)-2-phenyl-(9CI) (CA INDEX NAME)

L3 ANSWER 25 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



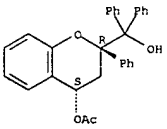
RN 63483-26-1 CAPLUS
CN 2H-1-Benzopyran-2-methanol, 3,4-dihydro-4-hydroxy-α,α,2-triphenyl-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 63483-27-2 CAPLUS
CN 2H-1-Benzopyran-2-methanol, 4-(acetyloxy)-3,4-dihydro-α,α,2-triphenyl-, cis- (9CI) (CA INDEX NAME)

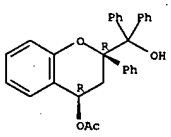
Relative stereochemistry.



RN 63483-28-3 CAPLUS
CN 2H-1-Benzopyran-2-methanol, 4-(acetyloxy)-3,4-dihydro-α,α,2-triphenyl-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L3 ANSWER 25 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



L3 ANSWER 26 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1975:170678 CAPLUS
DN 82:170678
TI Benzodipyran derivatives
IN Cairns, Hugh; Lee, Thomas Brian; Hazard, Richard
PA Fisons Ltd., UK
SO Ger. Offen., 49 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
PI	DE 2436551	A1	19750220	DE 1974-2436551		19740730
				GB 1973-37129	A	19730804
				GB 1974-7705	A	19740220
	FI 7402175	A	19750205	FI 1974-2175		19740716
				GB 1973-37129	A	19730804
				GB 1974-7705	A	19740220
	BE 818007	A1	19750123	BE 1974-146868		19740723
				GB 1973-37129	A	19730804
	FR 2240001	A1	19750307	FR 1974-26732		19740801
				GB 1973-37129	A	19730804
				GB 1974-7705	A	19740220
	NO 7402808	A	19750205	NO 1974-2808		19740802
				GB 1973-37129	A	19730804
				GB 1974-7705	A	19740220
	SE 7410002	A	19750205	SE 1974-10002		19740802
				GB 1973-37129	A	19730804
				GB 1974-7705	A	19740220
	NL 7410407	A	19750206	NL 1974-10407		19740802
				GB 1973-37129	A	19730804
				GB 1974-7705	A	19740220
	DK 7404138	A	19750401	DK 1974-4138		19740802
				GB 1973-37129	A	19730804
				GB 1974-7705	A	19740220
	DD 114071	C	19750712	DD 1974-180295		19740802
				GB 1973-37129	A	19730804
				GB 1974-7705	A	19740220
	JP 50076095	A2	19750621	JP 1974-88673		19740803
				GB 1973-37129	A	19730804
				GB 1974-7705	A	19740220
	ES 428942	A1	19760816	ES 1974-428942		19740803
				GB 1973-37129	A	19730804
				GB 1974-7705	A	19740220
				GB 1974-37129	A	19740726

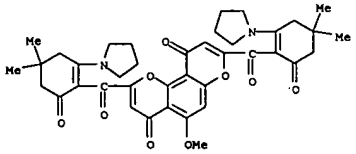
PATENT FAMILY INFORMATION:
FAN 1975:443027

	PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
PI	DE 2440950	A1	19750313	DE 1974-2440950		19740827
				JP 1973-95139	A	19730827
	JP 50047955	A2	19750428	JP 1973-95139		19730827
					A	
	US 3933928	A	19760120	US 1974-499546		19740821
				JP 1973-95139	A	19730827

L3 ANSWER 26 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

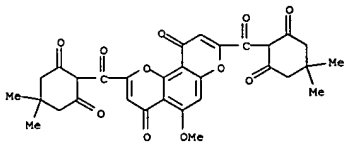
	NL 7411290	A	19750303	NL 1974-11290		19740823
				JP 1973-95139	A	19730827
	GB 1414115	A	19751119	GB 1974-37129		19740823
				JP 1973-95139	A	19730827
	BE 819212	A1	19741216	BE 1974-147931		19740826
				JP 1973-95139	A	19730827
	CA 1019350	A1	19771018	CA 1974-207812		19740826
				JP 1973-95139	A	19730827
	FR 2242355	A1	19750328	FR 1974-29225		19740827
	FR 2242355	B1	19790803			
				JP 1973-95139	A	19730827

ED Entered STN: 12 May 1984
GI For diagram(s), see printed CA Issue.
AB Antiallergic (no data) benzodipyrans I and II [R = CH(CO2Et)2, CHAcCO2Et, CHAc2, CH(CO2Et)CONMe2, CH2Ac, CH2Bz, 5,5-dimethyl-1,3-dioxo-2-cyclohexyl, 2-oxocyclopentyl, 2-oxocyclohexyl, 5,5-dimethyl-3-oxo-1-pyrrolidino-1-cyclohexen-2-yl, 6-methyl-2-oxocyclohexyl; R1 = OMe, OH, allyloxy; R2 = H, allyl, Br)] were prepared Thus, I (R = OH, R1 = OMe, R2 = H) was chlorinated and treated with EtOMgCH(CO2Et)2 to give 43% I [R = CH(CO2Et)2, R1 = OMe, R2 = H].
IT 55765-19-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and hydrolysis of)
RN 55765-19-0 CAPLUS
CN 4H,10H-Benzo[1,2-b:3,4-b']dipyran-4,10-dione, 2,8-bis[[4,4-dimethyl-6-oxo-2-(1-pyrrolidinyl)-1-cyclohexen-1-yl]carbonyl]-5-methoxy- (9CI) (CA INDEX NAME)

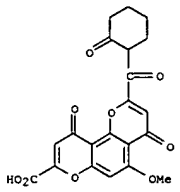


IT 55764-89-1P 55764-95-9P 55764-96-0P 55765-20-3P 55830-29-0P 55830-30-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 55764-89-1 CAPLUS
CN 4H,10H-Benzo[1,2-b:3,4-b']dipyran-4,10-dione, 2,8-bis[(4,4-dimethyl-2,6-dioxocyclohexyl)carbonyl]-5-methoxy- (9CI) (CA INDEX NAME)

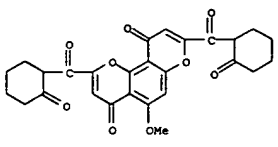
L3 ANSWER 26 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 55764-95-9 CAPLUS
CN 4H,10H-Benzo[1,2-b:3,4-b']dipyran-8-carboxylic acid, 5-methoxy-4,10-dioxo-2-[(2-oxocyclohexyl)carbonyl]- (9CI) (CA INDEX NAME)

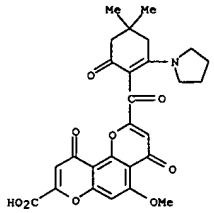


RN 55764-96-0 CAPLUS
CN 4H,10H-Benzo[1,2-b:3,4-b']dipyran-4,10-dione, 5-methoxy-2,8-bis[(2-oxocyclohexyl)carbonyl]- (9CI) (CA INDEX NAME)

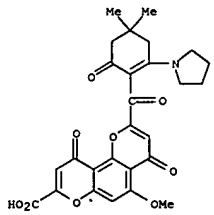


RN 55765-20-3 CAPLUS
CN 4H,10H-Benzo[1,2-b:3,4-b']dipyran-8-carboxylic acid, 2-[[4,4-dimethyl-6-oxo-2-(1-pyrrolidinyl)-1-cyclohexen-1-yl]carbonyl]-5-methoxy-4,10-dioxo- (9CI) (CA INDEX NAME)

L3 ANSWER 26 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



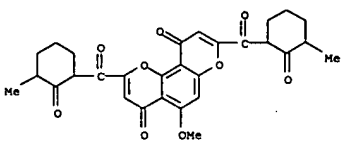
RN 55830-29-0 CAPLUS
CN 4H,10H-Benzo[1,2-b:3,4-b']dipyran-8-carboxylic acid, 2-[[4,4-dimethyl-6-oxo-2-(1-pyrrolidinyl)-1-cyclohexen-1-yl]carbonyl]-5-methoxy-4,10-dioxo-, sodium salt (9CI) (CA INDEX NAME)



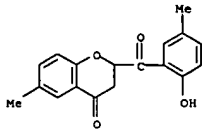
● Na

RN 55830-30-3 CAPLUS
CN 4H,10H-Benzo[1,2-b:3,4-b']dipyran-4,10-dione, 5-methoxy-2,8-bis[(3-methyl-2-oxocyclohexyl)carbonyl]- (9CI) (CA INDEX NAME)

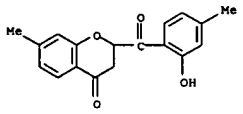
L3 ANSWER 26 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



L3 ANSWER 27 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1974:403723 CAPLUS
DN 81:3723
TI Syntheses of heterocycles. 178. Syntheses of chromanones and chromones
AU Mueller, Alfred K.; Henning, Gerald; Ziegler, Erich
CS Inst. Org. Chem., Univ. Graz, Graz, Austria
SO Justus Liebigs Annalen der Chemie (1974), (2), 195-200
CODEN: JLACBF; ISSN: 0075-4617
DT Journal
LA German
ED Entered STN: 12 May 1984
GI For diagram(s), see printed CA Issue.
AB The Fries rearrangement of trans-RC6H4O2CCH:CR1CO2C6H4R (R = 2-, 3-, or 4-Me, or 4-Cl; R1 = H) and the chlorinated analogs (R1 = Cl) gave the butenediones I (R1 = H) and I (R1 = Cl), cyclization of which gave the chromanones II and chromones III, resp.
IT 53164-53-7P 53164-54-8P 53164-55-9P
53164-64-0P 53164-65-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 53164-53-7 CAPLUS
CN 4H-1-Benzopyran-4-one,
2,3-dihydro-2-(2-hydroxy-5-methylbenzoyl)-6-methyl-
(9CI) (CA INDEX NAME)

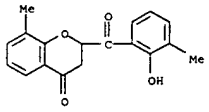


RN 53164-54-8 CAPLUS
CN 4H-1-Benzopyran-4-one,
2,3-dihydro-2-(2-hydroxy-4-methylbenzoyl)-7-methyl-
(9CI) (CA INDEX NAME)

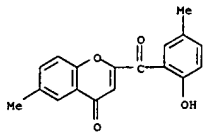


RN 53164-55-9 CAPLUS
CN 4H-1-Benzopyran-4-one,
2,3-dihydro-2-(2-hydroxy-3-methylbenzoyl)-8-methyl-

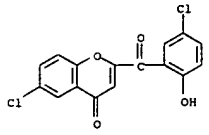
L3 ANSWER 27 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
(9CI) (CA INDEX NAME)



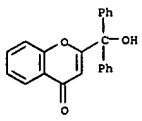
RN 53164-64-0 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-(2-hydroxy-5-methylbenzoyl)-6-methyl- (9CI) (CA INDEX NAME)



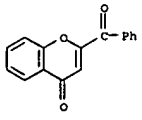
RN 53164-65-1 CAPLUS
CN 4H-1-Benzopyran-4-one, 6-chloro-2-(5-chloro-2-hydroxybenzoyl)- (9CI) (CA INDEX NAME)



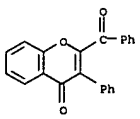
L3 ANSWER 28 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1974:36953 CAPLUS
DN 80:36953
TI Case of reduction in the reactions between phenylmagnesium bromide and ethyl chromone-2-carboxylate
AU Holmberg, Gust A.; Sjoholm, Rainer
CS Inst. Org. Kemi, Abo Akad., Abo, Finland
SO Acta Chemica Scandinavica (1947-1973) (1973), 27(6), 2020-2
CODEN: ACSAA4; ISSN: 0001-5393
DT Journal
LA English
ED Entered STN: 12 May 1984
GI For diagram(s), see printed CA Issue.
AB PhMgBr reacts with ethyl chromone-2-carboxylate (I, R = CO2-Et) to give I (R = PhCO and Ph2COH). A large excess of the Grignard reagent causes the formation of 1-(o-hydroxyphenyl)-3,4,4-triphenyl-3-buten-1-one. A reductive fission of the ether bond between the atoms in the positions 1 and 2 or a direct or indirect reduction of the double bond of the chromone
nucleus is apparently involved in the reactions.
IT 20924-64-5P 51685-51-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 20924-64-5 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-(hydroxydiphenylmethyl)- (9CI) (CA INDEX NAME)



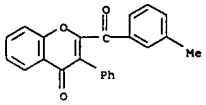
RN 51685-51-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-benzoyl- (9CI) (CA INDEX NAME)



L3 ANSWER 29 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1971:510141 CAPLUS
DN 75:110141
TI Reactions between arylmagnesium bromides and ethyl 3-phenyl-chromone-2-carboxylate. One or two cases of reduction
AU Holmberg, Gust. A.; Jalander, Lars
CS Inst. Org. Kemi, Abo Akad., Abo, Finland
SO Acta Academiae Aboensis, Series B: Mathematica et Physica (1970), 30(14),
9 pp.
CODEN: AAAMA4; ISSN: 0001-5105
DT Journal
LA English
ED Entered STN: 12 May 1984
AB The action of PhMgBr on Et-3-phenylchromone-2-carboxylate (I) at various temps., reaction times, and molar ratios gave varying amts. of Ph2, unchanged I, 2-benzoyl-3-phenylchromone, 2,3,4-triphenyl-1-(o-hydroxyphenyl)-2-butene-1,4-dione and 2 diastereoisomers of 2,3,4-triphenyl-1-(o-hydroxyphenyl)-1,4-butanedione. Similar reaction with m-MeC6H4MgBr gave unchanged I, (m-MeC6H4)2, 2-m-tolyl-3-phenylchromone, 1-(o-hydroxyphenyl)-2-phenyl-4-m-tolyl-2-butene-1,4-dione and 2 racemic mixture of the diastereoisomers of 3,4-di-m-tolyl-2-phenyl - 1
- (o-hydroxyphenyl) - 1,4 - butanedione. I was prepared by reaction of ethoxalyl chloride with PhCH2COC6H4OH-o.
IT 33470-12-1P 33470-14-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 33470-12-1 CAPLUS
CN Isoflavone, 2-benzoyl- (8CI) (CA INDEX NAME)

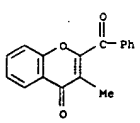


RN 33470-14-3 CAPLUS
CN Isoflavone, 2-m-toluoyl- (8CI) (CA INDEX NAME)



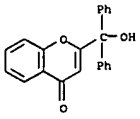
L3 ANSWER 29 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

L3 ANSWER 30 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1969:106314 CAPLUS
DN 70:106314
TI Action of arylmagnesium halides on ethyl coumarilate and its 3-methyl and 3-phenyl derivatives
AU Holmberg, Gust. A.; Malmstrom, Folke; Eriksson, Stig O.; Avellan, Carl E.
CS Abo Akad., Abo, Finland
SO Acta Academiae Aboensis, Series B: Mathematica et Physica (1968), 28(3), 7 pp.
CODEN: AAAMA4; ISSN: 0001-5105
DT Journal
LA English
ED Entered STN: 12 May 1984
GI For diagram(s), see printed CA Issue.
AB The effects of substitution on the reaction of PhMgBr with Et coumarilate (I), Et 3-methylcoumarilate (II), and Et 3-phenylcoumarilate (III) were investigated. The reaction of o-tolylmagnesium bromide with I, II, or III
gave the corresponding alc. IV. Treatment of I with 2-biphenylylmagnesium
iodide (V) gave VI and o-quaterphenyl and no tertiary alc. Thus, 0.025 mole of a coumarilate in 60 ml. dry Et2O was gradually added to the Grignard reagent prepared from 30 ml. dry Et2O, 1.50 g. Mg, and either 9.81
g. PhBr or 10.69 g. o-bromotoluene. The reaction mixture was gently warmed
15 min., poured into a mixture of 15 ml. HCl, 30 ml. H2O, and 100 g. ice, and the organic phase separated and worked up to give the following IV (R1, R2,
and m.p. given): H, Me, 140-1°; Me, Me, 136-7°; Ph, Me, 180-1°; Ph, H, 162-3°. 2-Iodobiphenyl (VII) was prepared by treating diazotized 2-aminobiphenyl with KI (Gilman, 1929). V was prepared
from VII and treated with I as before. Unreacted I was removed by alkaline
hydrolysis. To the oil in EtOH, a solution of KOH in H2O-EtOH was added, the
mixture refluxed 4 hrs., concentrated, the residue treated with Et2O and H2O, and
the Et2O layer concentrated and steam distilled until it contained no biphenyl or
2-iodobiphenyl by gas chromatog. Chromatog. of the residue on bentonite and eluting with CCl4 separated o-quaterphenyl, m. 117-18°, and VI, m. 132-3° (Et2O), which were identified by ir and mass spectra.
IT 20924-66-7
RL: PRP (Properties)
(spectrum of)
RN 20924-66-7 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-benzoyl-3-methyl- (9CI) (CA INDEX NAME)

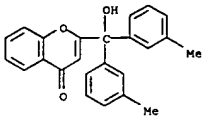


L3 ANSWER 30 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

L3 ANSWER 31 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1969:11486 CAPLUS
DN 70:11486
TI The action of phenylmagnesium bromide on ethyl chromone-2-carboxylate and its 3-methyl derivative
AU Holmberg, Gust. Ad.; Malmstrom, Folke; Blom, Ulf Ake
CS Abo Akad., Abo, Finland
SO Acta Chemica Scandinavica (1947-1973) (1968), 22(5), 1375-80
CODEN: ACSAA4; ISSN: 0001-5393
DT Journal
LA English
ED Entered STN: 12 May 1984
AB When PhMgBr reacts with ethyl chromone-2-carboxylate, 2-(diphenylhydroxymethyl)chromone is formed by 1,2-addition of the Grignard reagent to the carbethoxy group. The 3-methyl derivative of the ester reacts similarly. The mass spectrometric fragmentation of the reaction products is discussed.
IT 20924-64-5P 20924-65-6P 20924-66-7P
20924-67-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 20924-64-5 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-(hydroxydiphenylmethyl)- (9CI) (CA INDEX NAME)

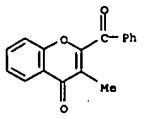


RN 20924-65-6 CAPLUS
CN Chromone, 2-(hydroxydi-m-tolylmethyl)- (8CI) (CA INDEX NAME)

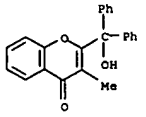


RN 20924-66-7 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-benzoyl-3-methyl- (9CI) (CA INDEX NAME)

L3 ANSWER 31 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

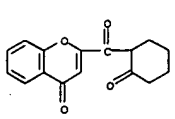


RN 20924-67-8 CAPLUS
CN Chromone, 2-(hydroxydiphenylmethyl)-3-methyl- (8CI) (CA INDEX NAME)

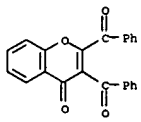


L3 ANSWER 32 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1968:29636 CAPLUS
DN 68:29636
TI Pyran, it analogs, and related compounds. XXI. Acyl derivatives of hromones
AU Zagorevskii, V. A.; Glozman, Sh. M.; Klyuev, S. M.
CS Inst. Farmakol. Khimioterap., Moscow, USSR
SO Khimiya Geterotsiklicheskikh Soedinenii (1967), (4), 592-5
CODEN: KGSSAQ; ISSN: 0132-6244
DT Journal
LA Russian
ED Entered STN: 12 May 1984
AB The condensation of 2,4-diacetylphenol (I) with diethyl oxalate (II) yielded a series of substituted chromones whose further reactions were studied. I (10.5 g.) and 17.2 g. II were added to an alkoxide solution (prepared from 2.72 g. Na and 60 ml. absolute EtOH), and the mixture heated with stirring on a steam bath for 4 hrs. The mixture was cooled to .apprx.40°, and 10 ml. concentrated HCl added. The mixture was boiled 30 min., allowed to stand overnight, poured into a saturated solution containing 12.5 g. Cu(OAc)2.H2O, treated with Na2CO3 to a pH of 5-6, kept 2 hrs., and extracted with 250 ml. C6H6. The precipitated Cu complex was filtered off and washed with C6H6. The combined C6H6 solns. were dried over MgSO4 and the solvent evaporated, affording 42.4% 2-carbethoxy-6-acetylchromone (III), m. 143-4° (EtOH). The Cu complex was treated with 50 ml. HOAc, 15 ml. concentrated HCl, and 100 ml. C6H6, the mixture filtered and the C6H6 solution separated, dried and the solvent distilled off. After the addition of 30 ml. HOAc and 10 ml. concentrated HCl to the residue, the mixture was heated 6 hrs. on a water bath. The precipitate was filtered, after dissolved in 5% NaHCO3 solution, and filtered. The filtrate, after treatment with activated C, was acidified with concentrated HCl affording 1 g. 6-hydroxyoxalylacetylchromone-2-carboxylic acid (IV), m. 230-1° (decomposition). Boiling 1 g. IV for 6 hrs. with 75 ml. absolute EtOH and 1 ml. concentrated H2SO4, cooling, and filtering afforded 0.72 g. 2-carbethoxy-6-ethoxyoxalylacetylchromone (V). The residue obtained by evaporating the mother liquor was treated with NaHCO3 to yield 0.23 g. addnl. V. V m. 142-3° (EtOH). Heating 10.4 g. III with 35 ml. concentrated HCl and 200 ml. HOAc for 6 hrs. on a steam bath, cooling, filtering the precipitate, and repptg. from NaHCO3 solution yielded 83.4% 6-acetylchromone-2-carboxylic acid (VI), m. 243-4° (decomposition) (EtOH). When the relative concentration of NaOEt were tripled in the first synthesis step, the yields of IV and VI became 29 and 21%, resp. The uv spectrum of VI is described. Treatment of 1.3 g. III with 4 ml. 32% CH2O, 0.9 g. Me2NH.HCl, and 0.2 ml. concentrated HCl, boiling for 3 hrs., cooling, filtering the residue, and washing with absolute EtOH and with Et2O afforded 39% 6-(m-dimethylaminopropionyl)-2-chromonecarboxylic acid-HCl, m. 239-40° (50% EtOH). By a similar procedure 6-(m-

L3 ANSWER 32 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
diethylaminopropionyl)-2-chromonecarboxylic acid-HCl, m. 204-5° (decompn.) (50% EtOH) was prepd. in 37% yield. Its uv spectrum is described. A soln. of 4.17 g. of the acid chloride (VII) of chromone-2-carboxylic acid in 25 ml. dry dioxane was added dropwise to a soln. of 3.42 g. of 4-pyrrolidino-2,3-dihydro-α-thiopyran and 3.3 g. Et3N in 15 ml. anhyd. dioxane. After 2 hrs., 30 ml. 10% HCl was added, and the mixt. stirred 1.5 hrs. at .apprx.20°. The residue was filtered, washed with NaHCO3 soln., yielding 52% 3-(2-chromonyl)tetrahydro-4-thiopyrone (VIII), m. 162-3° (EtOH). VIII is insol. in 10% NaOH and gives a red coloration with FeCl3. A soln. of 4.17 g. VII in 25 ml. anhyd. dioxane was added dropwise to a soln. of 3.3 g. 1-piperidinocyclohexene and 2.02 g. Et3N in 15 ml. anhyd. dioxane. The mixt. was kept for 1 hr. at .apprx.20° and then boiled 2 hrs., filtered, and washed with Et2O. The filtrate and Et2O-wash were combined, the Et2O boiled off, and 30 ml. 10% HCl added. After boiling for 1 hr. and cooling, the mixt. was filtered to yield 2.48 g. yellow 2-(2-chromonyl)cyclohexanone (IX). Addnl. 0.15 g. IX was recovered by Et2O extn. of the filtrate. IX, m. 149-50°, (EtOH), sol. in 10% NaOH, gives a dark red color with alc. FeCl3. A mixt. of 1 g. IX and 0.18 g. hydrazine hydrate in 40 ml. abs. EtOH was boiled for 3 hrs. The EtOH was removed in vacuo, yielding 100% 3-(2-chromonyl)-4,5,6,7-tetrahydrobenzpyrazole (X), m. 226-6.5° (EtOH). X is insol. in alkali and gives no color reaction with FeCl3. A soln. of 0.32 g. VIII and 0.056 g. hydrazine hydrate in 20 ml. EtOH was held for 48 hrs. at 20°. The EtOH was removed in vacuo, and the residue treated with 5 ml. 10% HCl yielding 97% 3-(2-chromonyl)-5',6'-dihydro-α-thiopyrano[3',4':4,5]pyrazole, m. 245-6°. It is insol. in alkalis and gives no color reaction with FeCl3. After adding 0.75 g. hydrazine hydrate to a suspension of 1.44 g. VIII in 25 ml. abs. EtOH, the mixt. was boiled for 3 hrs., cooled, and filtered to yield 69.7% 3-[3"-(o-hydroxyphenyl)-5"-pyrazolyl]-5',6'-dihydro-α-thiopyrano[3',4':4,5]pyrazole, m. 270° (decompn.). It does not dissolve in alkalis. It gives a dark green color with FeCl3.
IT 16796-37-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 16796-37-5 CAPLUS
CN Chromone, 2-[(2-oxocyclohexyl)carbonyl]- (8CI) (CA INDEX NAME)

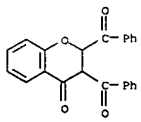


L3 ANSWER 33 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1966:10864 CAPLUS
DN 64:10864
OREF 64:1922e-h
TI Photochemistry of 2-benzyl- and 2-benzhydryl-3-benzoylchromones
AU Henderson, W. A., Jr.; Ullman, Edwin F.
CS Am. Cyanamid Co., Stamford, CT
SO Journal of the American Chemical Society (1965), 87(23), 5424-33
CODEN: JACSAT; ISSN: 0002-7863
DT Journal
LA English
OS CASREACT 64:10864
ED Entered STN: 22 Apr 2001
GI For diagram(s), see printed CA Issue.
AB The principal photochem. reaction of the title compds. (Ia and Ib) in benzene is photoenolization to give II (R = H and Ph). The reaction proceeds exclusively via the triplet state. In ethanol and iso-PrOH a reaction related to photopinacolization is also observed, and the same triplet intermediate is again implicated. The rate of enolization relative to H abstraction from solvent by the chromone Ia triplet is compared to that of o-alkylbenzophenones. The photoenols II (R = H and Ph) undergo photocyclization reactions in which singlet intermediates are demonstrated. By contrast, the enols undergo light-induced reketonization on excitation to their triplets. The evidence demands that intersystem crossing of singlet enol II (R = H), which has a strong intramol. H bond, occurs very inefficiently or not at all. Similar inefficient crossing of the singlets of the internally H bonded o-hydroxyphenyl ketones may account for the exceptional photostability of these compds.
IT 5530-10-9P, Chromone, 2,3-dibenzoyl-
RL: PREP (Preparation)
(preparation of)
RN 5530-10-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 2,3-dibenzoyl- (9CI) (CA INDEX NAME)



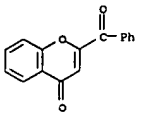
L3 ANSWER 34 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1961:65026 CAPLUS
DN 55:65026
OREF 55:12392i,12393a-d
TI Diacylation of 4-pyrones
AU Woods, L. L.
CS Texas Southern Univ., Houston
SO Journal of Organic Chemistry (1959), 24, 1804-5
CODEN: JOCEAH; ISSN: 0022-3263
DT Journal
LA Unavailable
ED Entered STN: 22 Apr 2001
AB Diacylation of various 4-pyrones in the presence of CF3CO2H (I) gave diketones in high yield, free of polymerized contaminants. The acyl halide (0.2 mole), 0.1 mole 4-pyrone, and 35 ml. I refluxed 30 min. or until HCl was no longer evolved, the mixture diluted with 150 ml. H2O, cooled, the precipitate filtered off, dried, and recrystd. from heptane gave the following (pyrone, acyl halide, compound formed, % yield, and m.p. given): 2,6-dimethyl-4-pyrone (II), p-MeC6H4COCl, di-p-toluoyl derivative (III) of II, 96, 177-8°; II, PhCH:CHCOCl, dicinnamoyl derivative (IV) of II, 85, 120°; II, BzCl, di-Bz derivative of II, 99, 111-13°; kojic acid diacetate (V), BzCl, di-Bz derivative (VI) of V, 100, 119-20°; α-chloro-α-deoxykojic acid (VII), BzCl (0.3 mole), di-Bz derivative (VIII) of VII benzoate, 100, 110°; benzodihydro-4-pyrone (IX), BzCl, di-Bz derivative (X) of IX, 61, 115-17°; V, AcCl, di-Ac derivative of V, 17, 121°. The pyrone and acid anhydride or phenacyl halide refluxed in I gave the following results (pyrone, anhydride or phenacyl halide, product, % yield, m.p. given): II, o-C6H4(CO)2O, 2-carboxybenzoyl derivative (XI) of II, 60, 133.5°; V, Bz2O, Bz derivative (XII) of V, 96, 144-5°; II, p-BrC6H4COCH2Br, p-bromophenacyl derivative of II, 90, 113°. III (4 g.) dissolved by warming in 15 ml. absolute EtOH, the solution treated with 10 ml. concentrated aqueous NH3, and stored overnight in a refrigerator gave the 4-imino derivative of III, m. 158-9° (heptane). III (3 g.) and 1.5 g. CH2(CN)2 refluxed 1 hr. in 25 ml. Ac2O and poured into 400 ml. ice H2O gave the malononitrile derivative of III, C32H20N6O, m. 160° (heptane). VI (3 g.) in 30 ml. EtOH treated gradually with 3 g. powdered KBH4 with magnetic stirring, the mixture kept overnight, treated with 50 ml. H2O containing 10 ml. concentrated HCl, and the product isolated with Et2O gave 4 g. reduction product, C24H22O8, m. 112.5-14.0° (heptane). XII (3 g.) treated similarly gave 1.3 g. reduction product, C17H16O7, m. 153-5° (heptane). Infrared data were given for III, IV, VIII, X, and XII.
IT 102596-08-7P, 4-Chromanone, 2,3-dibenzoyl-
RL: PREP (Preparation)
(preparation of)
RN 102596-08-7 CAPLUS
CN 4-Chromanone, 2,3-dibenzoyl- (6CI) (CA INDEX NAME)

L3 ANSWER 34 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

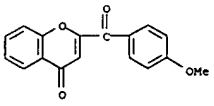


L3 ANSWER 35 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1953:28702 CAPLUS
DN 47:28702
OREF 47:4879d-i,4880a-b
TI Synthesis of 2-oxochromones
AU Schmutz, J.; Hirt, R.; Lauener, H.
CS Dr. A. Wander A.-G., Bern, Switz.
SO Helvetica Chimica Acta (1952), 35, 1168-78
CODEN: HCACAV; ISSN: 0018-019X
DT Journal
LA German
OS CASREACT 47:28702
ED Entered STN: 22 Apr 2001
AB 2-(Iodomethyl)chromone and C5H5N let stand 10 h. in Me2CO give 1-(4-oxo-1,4H-benzopyran-2-ylmethyl)pyridinium iodide (I), m. 222-3° (decomposition) (all m.ps. on the Kofler block and corrected), also formed from 2-methylchromone (II) and iodine in C5H5N heated 30 min. at 100° and then allowed to stand overnight. II with p-ONC6H4NMe2 (III) heated in EtOH and treated with a little NaOH gives N-(p-dimethylaminophenyl)-α-(4-oxo-1,4H-benzopyran-2-yl)nitrone (IV), m. 203 4°, also obtained from I and III. IV with HCl gives 4-oxo-1,4H-benzopyran-2-carboxaldehyde (V), m. 162-3° [oxime (VI), m. 162-3°; phenylhydrazone, m. 218-19°]. CrO3 converts V to the carboxylic acid (VII), m. 259-62° (decomposition). VI heated with Ac2O gives the 2-carbonitrile, m. 129-31°, sublimes at 57-60°/0.2 mm., hydrolyzed with H2SO4 to VII. II with SeO2 also gives VII. 2,3-Dimethylchromone and SeO2 give the 3-Me derivative of VII, m. 234-6°, and the 3-Me derivative of V, m. 145° (oxime m. 183-4°)(oxidized by CrO3 to the acid). 2-Ethylchromone and SeO3 give VII and 2-acetylchromone, b3 153-6°, m. 135-7° (oxime, m. 278-9°). Condensation of o-HOC6H4Ac and suitable esters in the presence of NaH gives alkylchromones. SeO2 with 2-propylchromone, b1 120-3° (HgCl2 compound, m. 95°), gives VII and 2-propionylchromone, b3 156-60°, m. 104-5° (oxime, m. 231-3°); with 2-butylchromone, b1.2 126-9°, it gives 2-butyrylchromone, b1 138-45°, m. 107° (oxime, m. 216°); with 2-isopropylchromone, b1 123-6°, 2-isopropionylchromone, b1 130-45°, m. 71-2° (oxime, m. 133-4°), together with crystals m. 125-7° (oxime, m. 227-8°), which were not studied; with 2-benzylchromone (VIII), m. 86-7°, SeO2 in aqueous dioxane gives 2-benzoylchromone (IX), b1 160-80°, m. 93-4° (oxime, m. 222-3°; phenylhydrazone, m. 172-3°). When this last reaction is run in Ac2O, a compound m. 132-3°, probably 2-(acetoxybenzyl)chromone is also obtained; VIII and CrO3 give IX. 2-[α-(p-Dimethylaminophenylimino)benzyl]chromone, m. 164-6°, heated with aqueous HCl, or 2-(α-isonitrosobenzyl)chromone, m. 220-1° [from VIII and iso-AmNO2 (X)], with aqueous H2SO4 also give IX. 2-(p-Methoxybenzyl)chromone (XI), m. 128.9°, and III give N-(p-dimethylaminophenyl)-α-(p-methoxyphenyl)-α-(4-oxo-1,4H-pyran-2-yl)nitrone (XII), m. 182-90°. X and XI give 2-(α-isonitroso-p-methoxybenzyl)chromone (XIII), m. 252-4°. XII and XIII hydrolyze to 2-(p-methoxybenzoyl)chromone, m. 99-100° (oxime, m. 250-2°; phenylhydrazone, m. 179-80°). By similar reactions N-(p-dimethylaminophenyl)-α-(7-methoxy-4-oxo-1,4H-pyran-2-yl)-α-phenylnitrone, m. 205-7°, and 2-(α-isonitrosobenzyl)-7-methoxychromone, m. 253-4° (from 2-benzyl-7-methoxychromone, m. 190-1°), give 2-benzoyl-7-methoxychromone, m. 118-20°

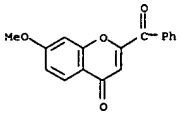
L3 ANSWER 35 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
(oxime, m. 251-3°; phenylhydrazone, m. 173-4°).
2-(3,4-Methylenedioxybenzyl)chromone, m. 131°, gives the corresponding nitrone, m. 128-31°/181-2°, and isonitroso compd., m. 223-5°, which hydrolyze to 2-(3,4-methylenedioxybenzoyl)chromone, m. 152-4°. Only V and IX have a coronary-dilating action on the isolated rabbit heart.
IT 51685-51-9, Chromone, 2-benzoyl- 80575-55-9, Chromone, 2-p-anisoyl- 376376-87-3, Chromone, 2-benzoyl-7-methoxy- (and derivs.)
RN 51685-51-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-benzoyl- (9CI) (CA INDEX NAME)



RN 80575-55-9 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-(4-methoxybenzoyl)- (9CI) (CA INDEX NAME)

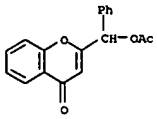


RN 376376-87-3 CAPLUS
CN 4H-1-Benzopyran-4-one, 2-benzoyl-7-methoxy- (9CI) (CA INDEX NAME)



IT 525599-68-2P, Chromone, 2-α-hydroxybenzyl-, acetate
854846-54-1P, Chromone, 2-piperonyloyl-
RL: PREP (Preparation)
(preparation of)
RN 525599-68-2 CAPLUS

L3 ANSWER 35 OF 35 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
CN 4H-1-Benzopyran-4-one, 2-[(acetyloxy)phenylmethyl]- (9CI) (CA INDEX NAME)



RN 854846-54-1 CAPLUS
CN Chromone, 2-piperonyloyl- (5CI) (CA INDEX NAME)